Commander in Chief 21ST Century (CINC21)

Decision Focused Command and Control (DFC2) vB.2 User's Manual

Version 1.0

15 October 2003

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1. Scope

This document describes the user interface, which will hereafter be called the DFC2 desktop or application, for the Commander in Chief 21 (CINC21) Decision Focused Command and Control (DFC2) application. Readers of this document will acquire a basic understanding of the system software tools as well as navigation of the application. This document does not address the system hardware or system administration functions.

1.1 Identification

The operating platform for the CINC21 DFC2 application is Windows 2000. System components are:

BEA Systems - WebLogic Platform 8.1
MayaViz - CoMotion 2.3
ORACLE 8i
Sun Microsystems - Java 2 Platform, Enterprise Edition 1.4 (See Section 4.1.3 for runtime parameters for DFC2)
Sun Microsystems - Apache HTTP Server 2.0.47

1.2 System Overview

CINC21 is an Advanced Concept Technology Demonstration (ACTD) that addresses the critical need to accelerate the ability of decision-makers to understand the impact of events and be able to collaborate, plan, and decide on appropriate courses of action with all essential parties wherever they are located. CINC21 implements mechanisms for the rapid utilization of information, visualization, display and manipulation of data. This is most powerfully realized through the drag-and-drop DFC2 functionality, which allows the user to move related information from one workspace to another.

DFC2 is a decision support tool and is the initial implementation of CINC21. It is focused upon the decision-making capacity of combatant commanders worldwide. The DFC2 system is composed of network servers, web browser clients, and information content technologies that allow dynamic information management. It supports force-level planning and execution built around the Decision Focused Command and Control concept, by providing the technology that makes dealing with Decision Points, CCIRs, and Options manageable by the user. By linking processes, workflow, and the Decision Context, the system captures the Battle Rhythm in an automated format that goes beyond simple meeting schedules and briefings. The system serves as a database, collaborative tool, shared repository, planning tool, process management system, and visualization tool.

1.3 Conventions

The naming conventions employed by DFC2 parallel the terminology used by a real-time operations center, e.g., CCIRs, DPs, etc. The objects used in the construction of a

"Decision Space" are familiar to the normal user in an operational context. Available symbols and colors can be used to depict the operational status of any situation. The conventions used by DFC2 relate to the terminology and concepts that are used by the Joint Operational Planning and Execution System (JOPES) community. Within this community, the paradigm that is modeled employs the use of operations, phases, decision points, CCIRs and tasks.

1.4 About This Manual

This manual is intended to provide answers to questions that may arise while using the DFC2 application. It provides details relating to the functional aspects of the DFC2 application software as well as a practical application of that functionality.

Section 1 of this manual addresses the **scope** of the DFC2 application, to include identification of the system, a brief overview of the system, the organization of this manual, and the system requirements.

Section 2 lists **documents** that were used as reference material in the development of this manual.

Section 3 provides a **software summary** for the DFC2 application.

Section 4 addresses **accessing** the DFC2 application and getting **familiar** with navigating the DFC2 desktop and tools.

Section 5 describes the **DFC2 desktop components and tools** and gives a brief description or example of how each may be used.

Section 6 provides a **glossary** of some of the most commonly used terms in this manual, as well as a listing of **acronyms** used in this manual.

1.5 How to Use This Manual

This manual is designed for use by anyone with some computer experience, particularly with a Graphical User Interface (GUI) such as a Macintosh or a Windows-based PC. This manual should be used to become familiar with the operations of the DFC2 application and serves as a reference document for everyday operations.

This manual is intended to help the user navigate to a specific area of the DFC2 desktop and perform basic operations. Actual pictures or graphical representations of different views, objects, and workspaces are included to allow users to confirm that they are interacting with the system correctly. As with any software, the DFC2 application will grow and change. Minor changes to the look of the software may occur over time, but the basic operation of the system should remain the same.

The following conventions are used in this manual:

Menu Items/Buttons	***Bold and Italics***
Window or View Name	*Italics*
Text Fields	**Bold**
	An important note or caution.

1.6 System Requirements

For optimum performance, the following are recommended for accessing the DFC2 application:

- Network connectivity
- Web browser (Internet Explorer 5.0 or higher; or Netscape 4.7 or higher)
- 512MB RAM
- Java ™ plug-in (check with the System Administrator or the DFC2 System Administrator Manual for correct version number)

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2. Referenced Documents

DFC2 Technical Description, Block 2B2, 29 August 2003

DFC2 System Administration Manual, TBD *

DFC2 Training Manual, TBD *

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3. Software Summary

3.1 User Interface Software

The DFC2 application software is intended to provide a means whereby all pertinent supporting information can be collected in a single location, thus allowing for presentation of the information to the decision-maker in a logical and concise manner. The creative and intelligent use of the tools provided by the DFC2 application software will allow the user to construct a decision support environment in which the objectives of the DFC2 are met.

3.2 Software Inventory

The DFC2 application is a Government Off-the-Shelf (GOTS) tool that, in conjunction with a back-end database and integration software, provides a user-friendly view of the decision support environment. For further details regarding the different software components, see the DFC2 System Administrator's Manual (SAM).

All files necessary for operation of the DFC2 application are present upon successful software installation. Refer to the DFC2 Technical Description for a detailed listing of software files, databases, data files, executables and scripts that are required in order for DFC2 application software to operate.

3.3 Software Environment

The DFC2 configuration is comprised of three main software components: CoMotion, WebLogic and an Oracle Database. The only software required on a client system is a Web browser, such as Internet Explorer or Netscape Navigator, and a downloadable Java plug-in.

Refer to the DFC2 Technical Description for a detailed listing of hardware, software and equipment that comprise the DFC2.

3.4 Assistance and Problem Reporting

The user should contact their local Help Desk for assistance if they encounter problems with the DFC2 application.

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4. Access to DFC2

DFC2 is accessed using a Web browser from the user's desktop. The system can be accessed using most common Web browsers, such as Internet Explorer or Netscape. The user should check with the DFC2 System Administrator for the proper web address to access the DFC2 application.

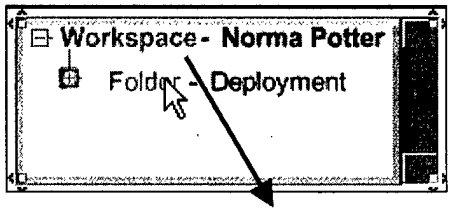
4.1 Software Setup

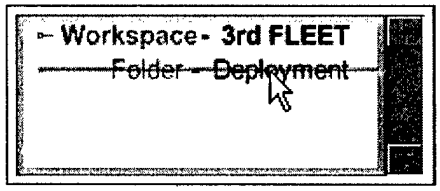
4.1.1 Familiarization

There are a number of symbols and functions with which the user should become familiar before using the DFC2 application. Navigation throughout the application is accomplished via drag-and-drop operations performed on desktop views, frames or DFC2 objects. A **frame** is a container that is similar to what other software applications refer to as a "window."

The following are some important tips that will make for more effective use of the DFC2 application:

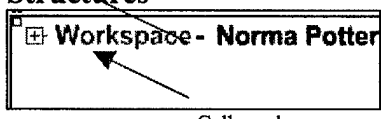
Drag and Drop Mouse Functions



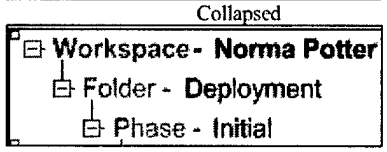


Most functions are implemented using the mouse. The basic functionality of the system is drag-and-drop. Dragging and dropping allows the user to move an item and all of its contents from one workspace to another. This is similar to moving folders and files from one location to another within the directory structure of a Windows environment.

Expand or Collapse Directory Structures



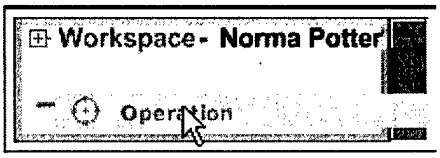
Collapsed



Expanded

In the workspace and hierarchy views, the directory structure is displayed. By clicking on the + or - icon beside the different items within the structure, the user may expand the particular directory structure item to show additional items within it or collapse a directory to hide the items within it.

Active Frame Denoted by Blue Border or Outline



Upon dragging an object to a frame, the user must ensure that the frame is active before dropping the object into it. The active frame is denoted by a blue outline or border.

In order to ensure that the correct frame is active when attempting to place an object in it, do the following:

- **Drag the object over the frame into which it is to be placed.**
- **Press the down arrow key on the keyboard until the blue border outline appears around the target frame.**
- **Release the object into the frame.**

Dismiss Target Does Not Delete Data

The ***Trash*** icon or ***Dismiss Target*** tab, found on most frames, does not delete the data. Rather, it only dismisses it from the working area. The information can always be dragged from the Workspace or hierarchy and dropped back into the working area.

4.1.1.1 Desktop Navigation Symbols

When moving objects on the desktop, the user will see one of two symbols: an arrow or a drag (hand) symbol.

The **arrow** symbol denotes the position of the mouse pointer in the desktop. It is also the only cursor symbol that will allow for scrolling within a frame containing a scroll bar such as the *Workspace*, *Dispenser*, and the *New Object Palette* frames when they are not completely expanded.

The arrow symbol is also the cursor that appears when hovering over objects in the *Workspace*, *Dispenser* and *New Object Palette* frames and is used to drag the objects onto the desktop.

The ***Drag*** cursor, shaped like a hand, is used to move a frame or object around on the desktop and is discussed in more detail in section 4.1.1.2 below.

Note: The user can move frames on the DFC2 desktop by hovering the mouse cursor over an area on the frame and holding it in place until the arrow cursor changes to a drag cursor (hand). Then dragging and dropping will accomplish the desired operation.

Another important symbol that the user will see on the desktop is the ***Trash*** icon, which is sometimes referred to as the "Dismiss Target" symbol.

The **Trash** (or **Dismiss Target)** symbol is used to remove objects from the desktop. Dragging objects onto the **Trash** symbol does not permanently delete them as long as the objects have been placed within the hierarchy of the workspace in which the user is working. The object is just dismissed from the desktop.

When dragging items onto the **Trash** symbol, the user must ensure that the blue border appears around the icon before dropping the item into it. This allows the item to be dismissed from the desktop. If the blue border does not appear when the item is dropped, the item will remain on the desktop.

4.1.1.2 Frame Manipulation Symbols

It is important that the user be able to differentiate between the different cursors and the actions performed by each within frames. The different frame cursor functions are described below.

The ***Drag*** cursor appears when hovering over title bars or headings on charts, tables and other views, and when hovering near the edge of a frame.

The ***Clip/Unclip*** cursor is used to reveal hidden contents of a frame (such as more columns in a table). It can be used to shape a view to show only the relevant information for the situation.

The ***Stretch*** cursor is used to spread symbols out (or to compress them) in a frame. The frame boundaries are changed and the symbols are redistributed, but the symbols do not change in size. Stretching is not available for all frame types and if it is not an option, the stretch cursor will not appear.

The ***Magnify*** cursor is used to enlarge or shrink frames and their contents. Magnification does not allow the user to see more of view; rather, it magnifies or shrinks the entire view.

The default cursor found in the corners of each frame is the ***Clip/Unclip*** cursor. To change the cursor to a different symbol (e.g., ***Stretch*** or ***Magnify***), just place the mouse cursor over any corner on the frame, right-click, and select a different symbol from the drop-down menu shown in Figure 4-1 below. If an option is unavailable for that frame, it will be grayed out and the user will not be able to select it.

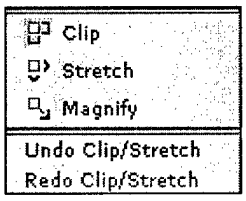


Figure 4-1. Cursor Change Menu

An alternative means of changing the cursor functionality is by left-clicking on any corner of a frame. Each left-click will change the operation from ***Clip***, to ***Stretch***, to ***Magnify***. Note that the user can also undo or repeat a ***clipping*** or ***stretching*** operation by right-clicking and selecting the appropriate ***Undo Clip/Stretch*** or ***Redo Clip/Stretch*** option from the drop-down menu. The user should keep in mind that ***Magnify*** operations cannot be undone or repeated; ***magnifying*** must be accomplished by changing the cursor to ***Magnify*** and then dragging the corners of the frame.

4.1.1.2.1 Dragging

Dragging allows the user to move a frame or object from one point to another on the desktop. ***Dragging*** is illustrated in Figure 4-2 below. ***Dragging*** frames can only be accomplished when the mouse cursor is displayed in the shape of a hand.

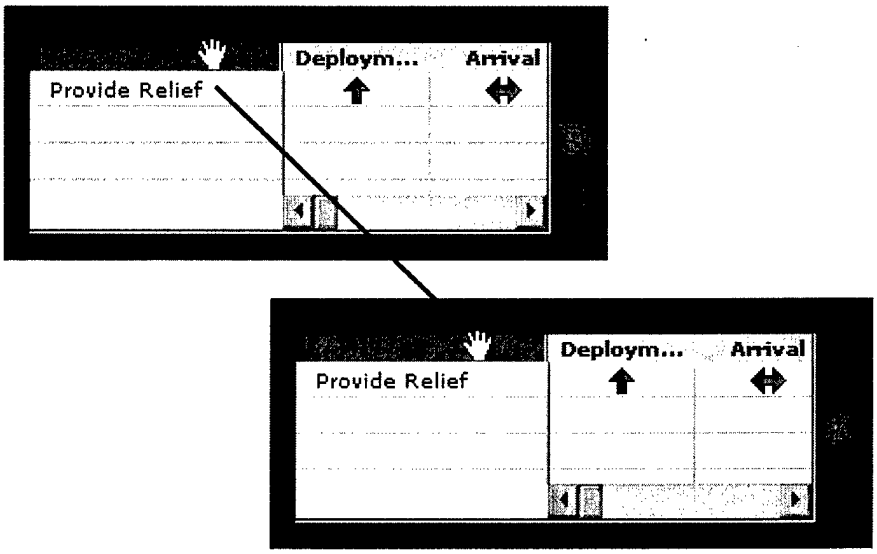


Figure 4-2. Dragging Illustration

4.1.1.2.2 Clipping/Unclipping

Clipping, similar to cropping an image, can be used to shape the view to show only relevant content, as illustrated in Figure 4-3 below. Using this function, the user can show as much or as little content as desired by dragging the ***clip*** cursor from any corner of the frame. Right-clicking on the corner of the frame and selecting the ***Undo Clip*** option from the drop-down menu can undo a ***clipping*** operation.

Figure 4-3. Clipping Illustration

4.1.1.2.3 Stretching

Stretching changes the frame boundaries and redistributes the symbols within the frame. By dragging the ***stretching*** arrows on the lower right corner of the window down and to the right, the boundaries of the window expand and the contents inside the frame redistribute to accommodate the new frame size. Note that additional information is visible when the window is expanded using the ***stretch*** function. ***Stretching*** is illustrated in Figure 4-4 below. ***Stretching*** can be accomplished from any corner of the frame. Right clicking on the corner of the frame and selecting the ***Undo Stretch*** option from the drop-down menu will undo a ***Stretching*** operation.

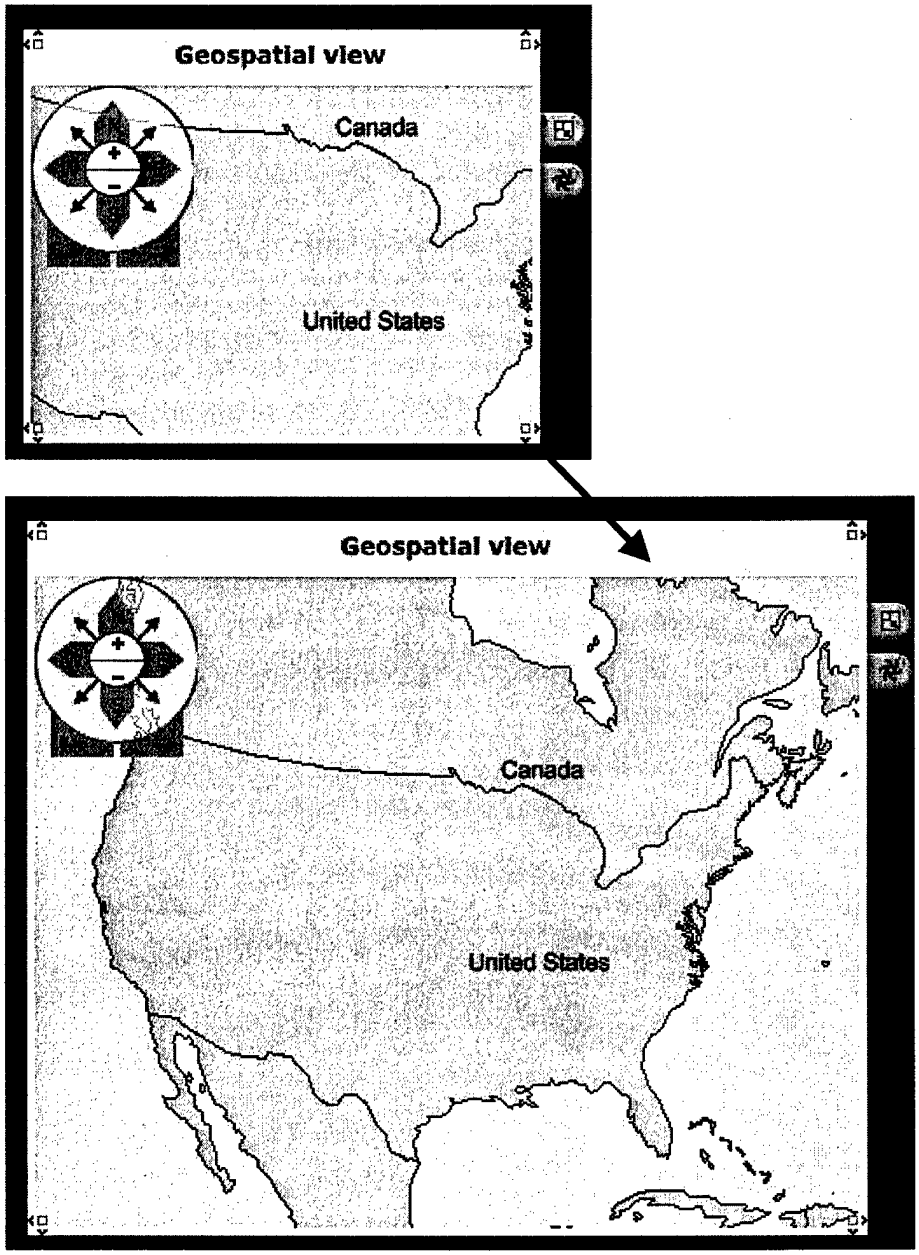


Figure 4-4. Stretching Illustration

4.1.1.2.4 Magnifying

Magnifying changes the size of a frame and its contents, as illustrated in Figure 4-5 below. The user can magnify a frame by dragging the ***Magnify*** cursor on any corner of the frame. Note that magnifying cannot be undone from the right-click menu. To bring the image back to its previous size, the user must reverse the drag operation by dragging the corner in the opposite direction.

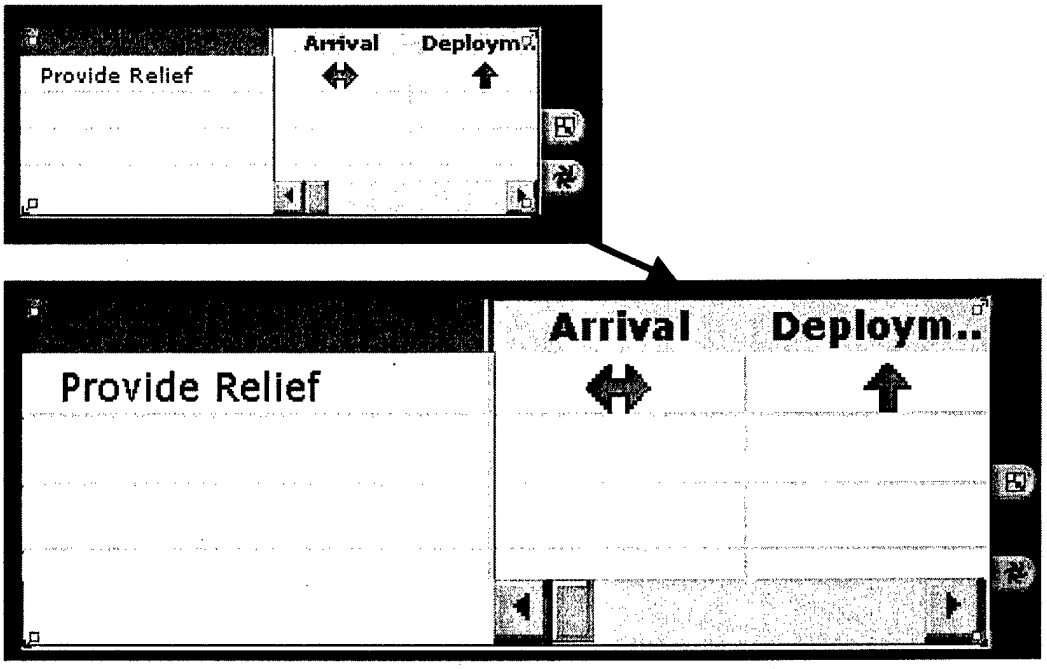


Figure 4-5. Magnifying Illustration

4.1.1.3 Frame Operational Symbols

The different frames that can be placed on the DFC2 desktop have symbols denoting operational controls that can be performed on the individual frame. The operational controls included on most frames are similar to tabs and include:

Called ***Iconify***, this frame control allows the frame to be reduced in size to an icon. To restore an iconified frame to its normal size, just double-click on the iconified version of the frame.

The ***Dismiss Target*** (***Trash***) frame control allows the frame to be dismissed. This control serves the same functionality as dragging the frame to the ***Trash*** icon on the desktop.

The ***Dynamic Query*** control, found only on the *Timeline View*, allows the user to filter data within the timeline to display only that information which the user

wishes to display.

4.1.1.4 Desktop Right-Click Menu

Clicking with the right mouse button in different areas produces different drop-down menus. Some menus have submenus, denoted by an arrow beside the menu option. When the cursor is placed over the arrow, the submenu for that option is displayed. An example is illustrated in Figure 4-6 below.

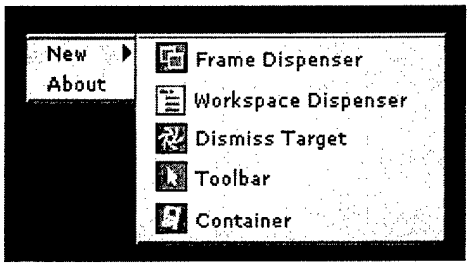


Figure 4-6. Right-Click Menu and Sub-Menu Options

As shown in Figure 4-6 above, when the user clicks with the right mouse button on an unused space on the desktop, a drop-down menu is displayed. Two options are available in the initial drop-down menu: ***New*** and ***About***.

4.1.1.4.1 New Menu Option

If the ***New*** menu option is selected from the right-click drop-down menu, a submenu of functional items, as shown in Figure 4-7, is displayed.

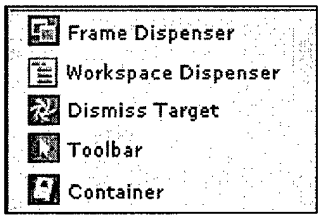
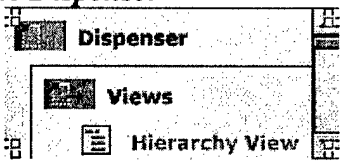


Figure 4-7. New Menu Options

These ***New*** menu options serve as shortcuts to some of the more commonly used functions within the DFC2 desktop. This is beneficial when the user has dismissed these items from the desktop and would like to recover them to the desktop.

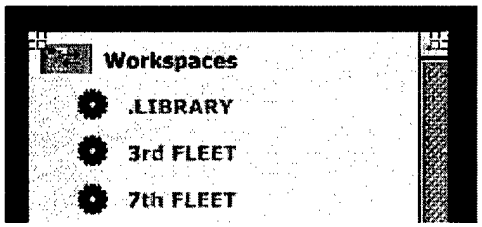
The menu items and a short description of their functionality are provided below:

Frame Dispenser



Selecting this option displays a copy of the *Dispenser Frame* (the same frame that is displayed by default when the user first logs in to the desktop).

Workspace Dispenser



Selecting this option displays a copy of the *Workspace Dispenser Frame* the same frame that is displayed by default when the user first logs in to the desktop).

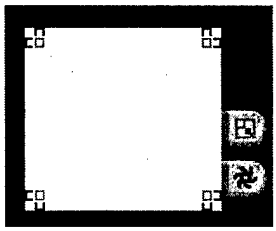
Dismiss Target (Trash)

Selecting this option displays a copy of the ***Trash*** symbol (the same symbol that is displayed by default when the user first logs in to the desktop and also the same symbol that is displayed when the user drags the ***Trash Can*** object from the *Tools* section of the *Dispenser Frame* onto the desktop).

Toolbar

Selecting this option displays a copy of the ***Toolbar*** (the same ***Toolbar*** that is displayed by default when the user first logs in to the desktop and the same one displayed when the user drags the ***Toolbar*** object from the *Tools* section of the *Dispenser Frame* onto the desktop).

Container



Selecting this option displays a copy of the *Container Frame* (the same frame that is displayed when the user drags the ***Container*** option from the *Organizers* section of the *Dispensers Frame* to the desktop).

4.1.1.4.2 About Menu Option

If the ***About*** menu option is selected from the right-click drop-down menu, the versioning information is displayed, as shown in Figure 4-8.

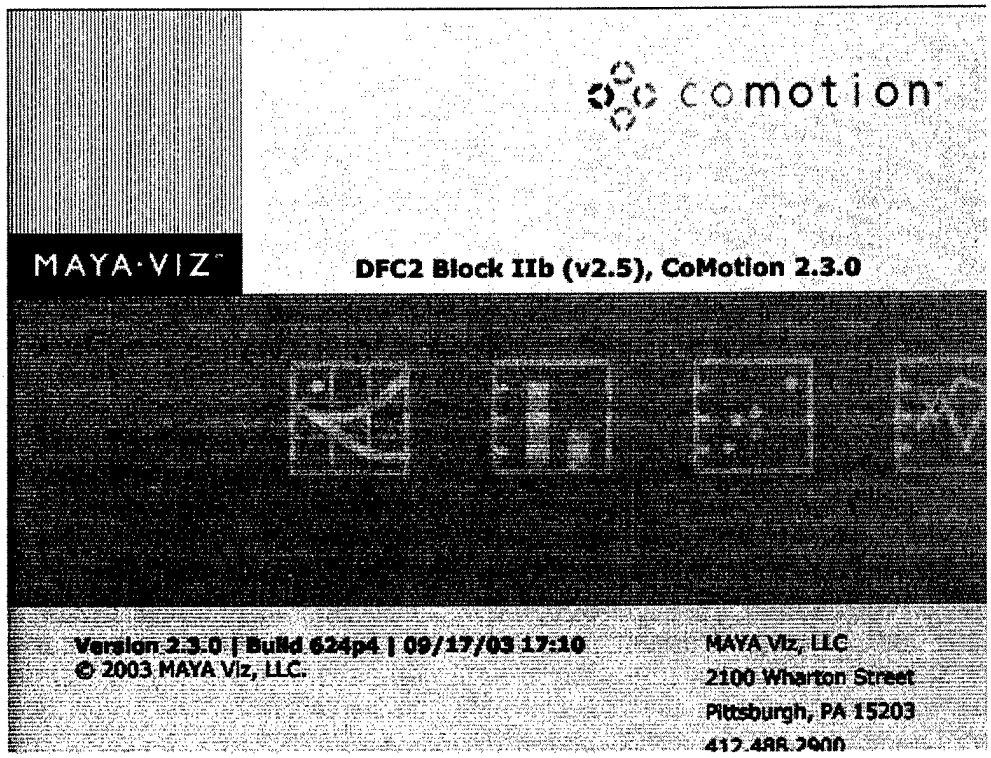


Figure 4-8. Versioning Information

Additional right-click functions will be addressed within the section pertaining to the specific function being addressed, e.g., creating tables, charts, timelines, etc.

4.1.2 Access Control

The user should check with his/her DFC2 System Administrator to apply for a user ID and password. Once these have been received, the user will need to change the password as described in section 4.2.2 of this manual.

4.1.3 Installation and Configuration

The only requirement the user will have for installing software is the download and installation of the JAVA plug-in. The user should ensure that the Java runtime parameters for the plug-in's advanced option are set to: -Xms128m -Xmx256m.

To add the Java ™ Runtime Parameters:

1. Display the *Control Panel* for the configuration (e.g., Start|Settings|Control Panel).
2. Double-click on the **Java ™ Plug-in** option or icon.
3. Click on the **Advanced Tab** of the *Java ™ Control Panel.*
4. Insert the recommended parameters into the **Java Runtime Parameters** field.
5. Click the **Apply** button.
6. Close the *Java ™ Control Panel.*

A typical Java ™ Runtime Parameters setting would look similar to Figure 4-9 below.

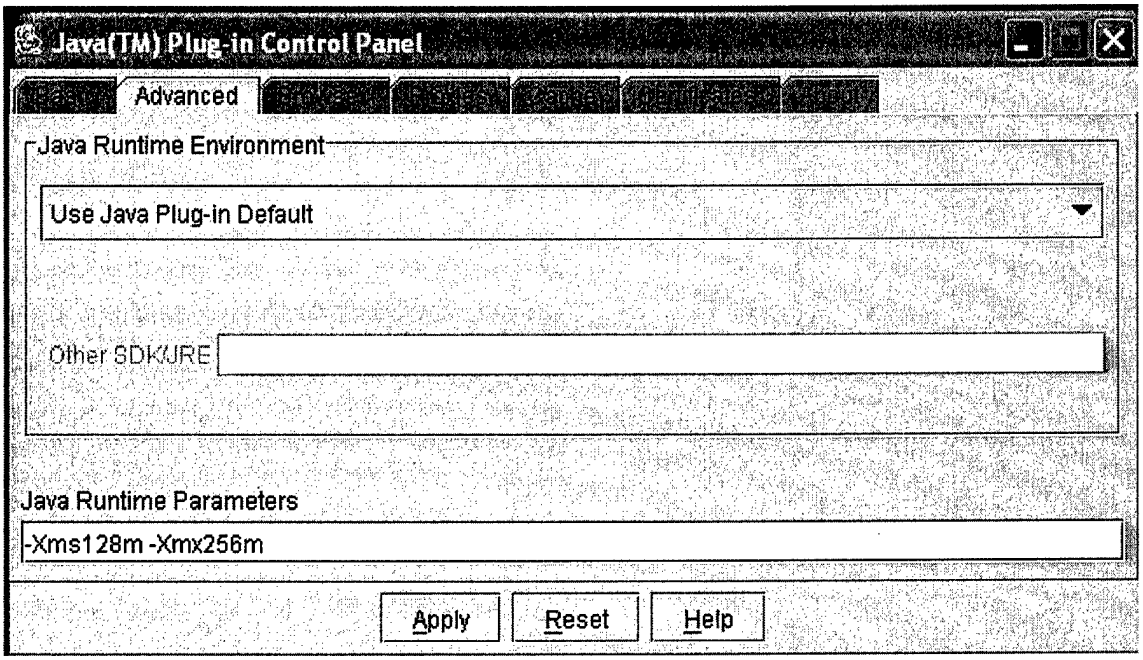


Figure 4-9. Java ™ Plug-in Control Panel with Recommended DFC2 Parameters

The user should check with the DFC2 System Administrator regarding the JAVA plug-in requirements for their particular configuration.

4.2 Initiating a Session

Launching a compatible web browser and entering the appropriate URL in the address line allows for initiation of a DFC2 session.

4.2.1 DFC2 Login

Users are issued a unique user ID and password by their system administrator. The user can only change his/her password from the login screen that is displayed when launching the URL from a browser.

From the *DFC2 Login Window*, the following fields are available:

> **Server**: This field is automatically populated based on the URL in the Web browser address field.
> **Username**: The user will enter the user ID issued when the System Administrator set up the user account.
> **Password**: The user will enter the unique password issued when the System Administrator set up the user account.
> ***Change Password*** Button: Launches the Change Password Window.
> ***Cancel*** Button: Closes the *DFC2 Login Window* without logging the user into the system.
> ***OK*** Button: Initiates the login process.

To initiate a DFC2 session:

1. Double-click on the icon for the desired Web browser (e.g., Internet Explorer or Netscape Navigator).
2. Enter the URL for the server in the ***Address*** field.
3. Wait for the Java Applet to load and the *DFC2 Login Window* (Figure 4-10) to display.
4. Enter the unique username that was issued by the DFC2 System Administrator.
5. Enter the unique password that was issued by the DFC2 System Administrator.
6. Click the **OK** button.

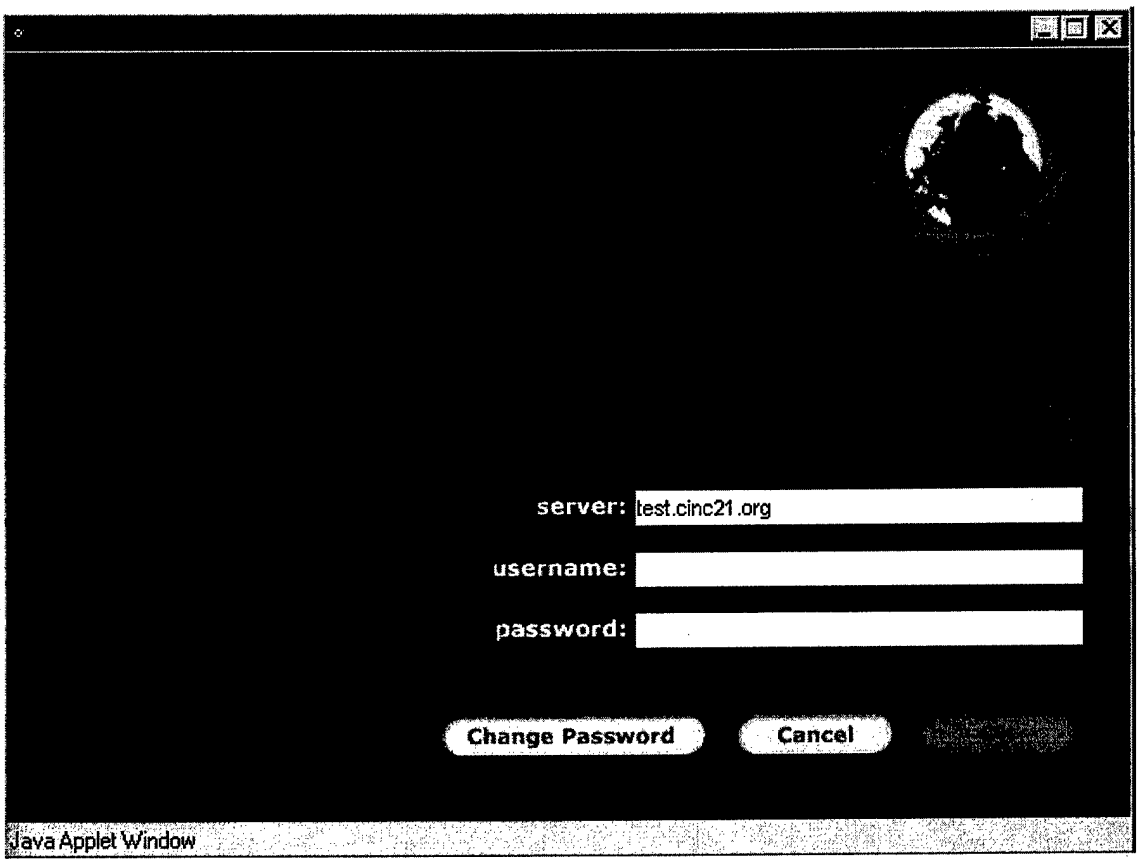


Figure 4-10. DFC2 Login Window

Upon successful login, the screen will display the message "*Loading Java Applet ...*" (Figure 4-11) and the blue line will indicate the progress of the applet load.

Figure 4-11. Loading Java Applet Message

This may take a few seconds, so be patient.

When the Java Applet has completely loaded, the user's desktop (Figure 4-12) will be displayed.

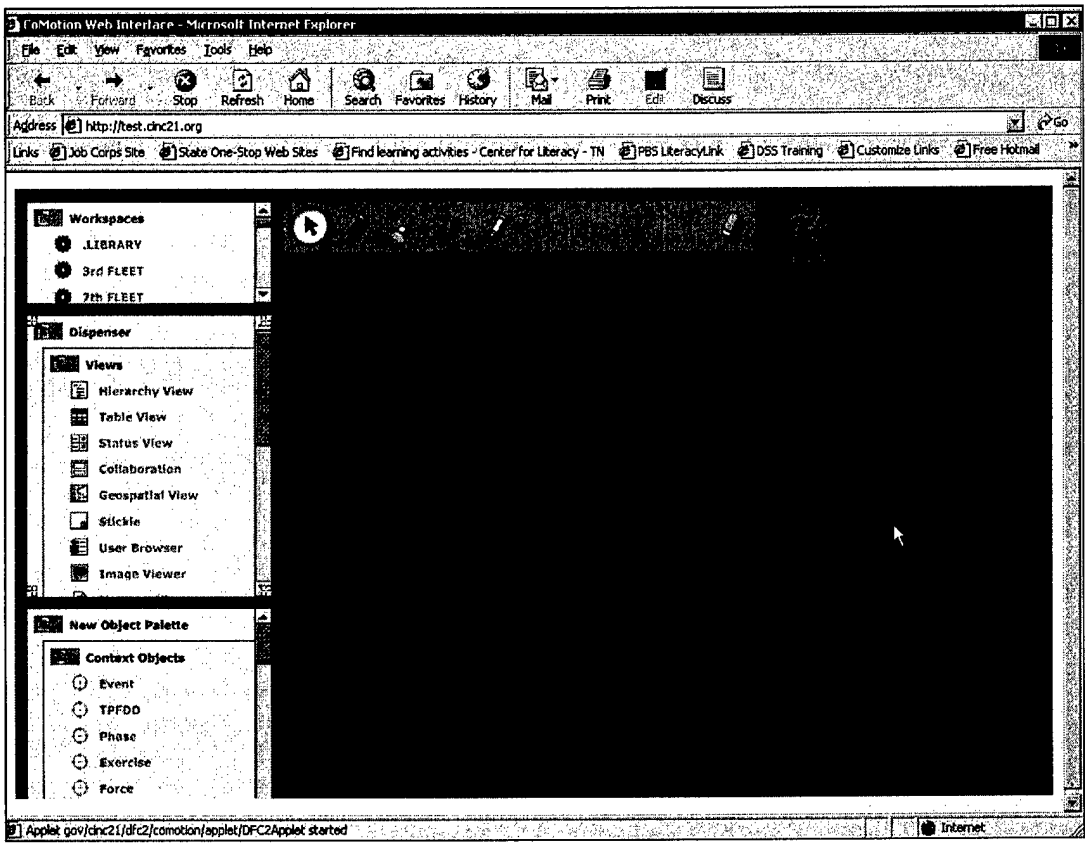


Figure 4-12. User Desktop Upon Initial Login

The user should refer to section 5.7 of this manual for an explanation of any message that may be displayed when attempting to login to the DFC2 application.

4.2.2 Change Password

The user may change the password at any time via the *DFC2 Login Window* (Figure 4-10) by clicking on the ***Change Password*** button. When the ***Change Password*** button is clicked, the *Change Password Window*, Figure 4-13, is displayed.

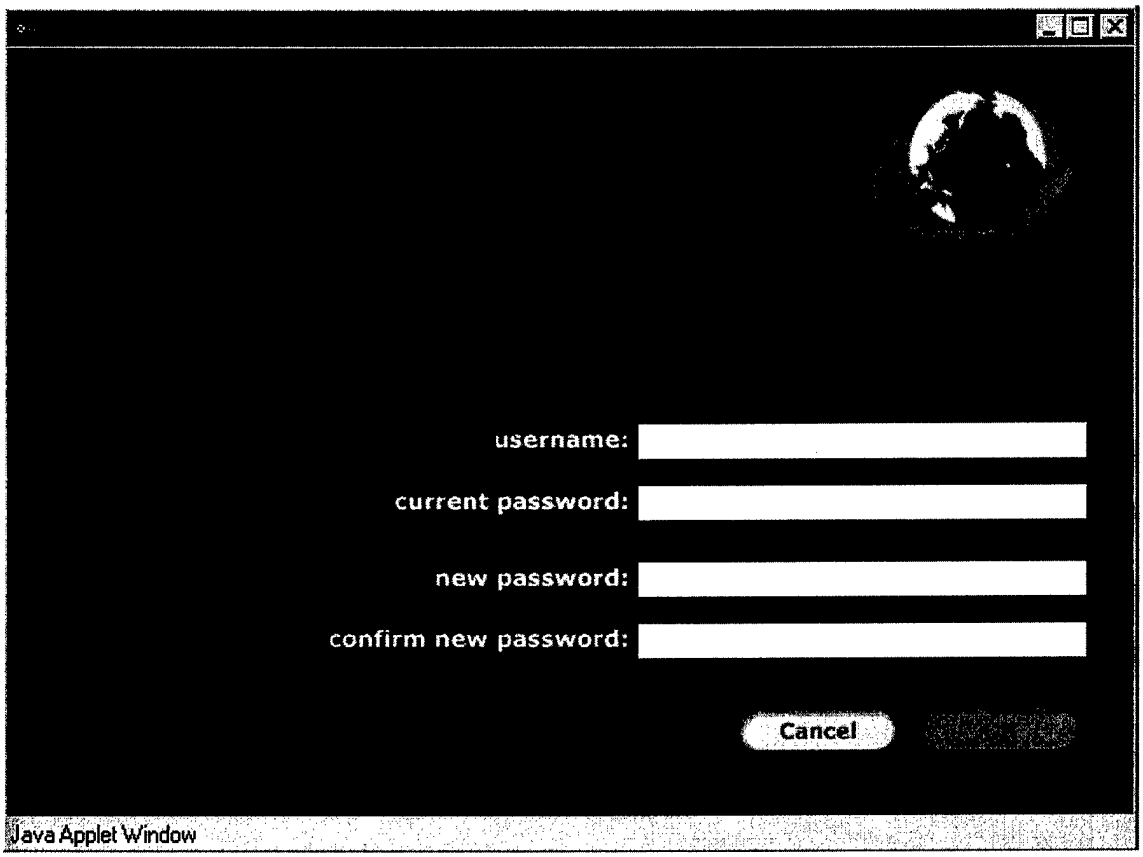


Figure 4-13. Change Password Window

From the *Change Password Window*, the following fields are available:

Username: Enter the unique username of the account for which the password is to be changed.
Current Password: Enter the current password for the account.
New Password: Enter the new password.
Confirm New Password: Enter the new password exactly the way it was entered in the **New Password** field.
Cancel Button: Closes the *Change Password Window* without changing the password.
OK Button: Initiates the password change process.

4.3 Stopping and Suspending Work

Because DFC2 is accessed via a web browser, the user can exit at any time by clicking the "X" in the upper right corner of the browser.

Also, since DFC2 ensures that all information and views are stored (or persisted), the user can be assured that upon future access, the desktop will appear the same as it was when the browser was closed.

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5. DFC2 Processing Guide

The default DFC2 working desktop environment, depicted in Figure 5-1 below, consists of a number of different frames when the user initially logs in to the system. Normally there will be three frames down the left side of the desktop containing such titles as "*Workspaces*," *Dispenser*," and "*New Object Palette*." To the right of these three frames, the ***Toolbar*** and the ***Trash Can*** icon are displayed. In subsequent logins, the user's desktop will appear exactly as it was when the user closed the browser to end the session.

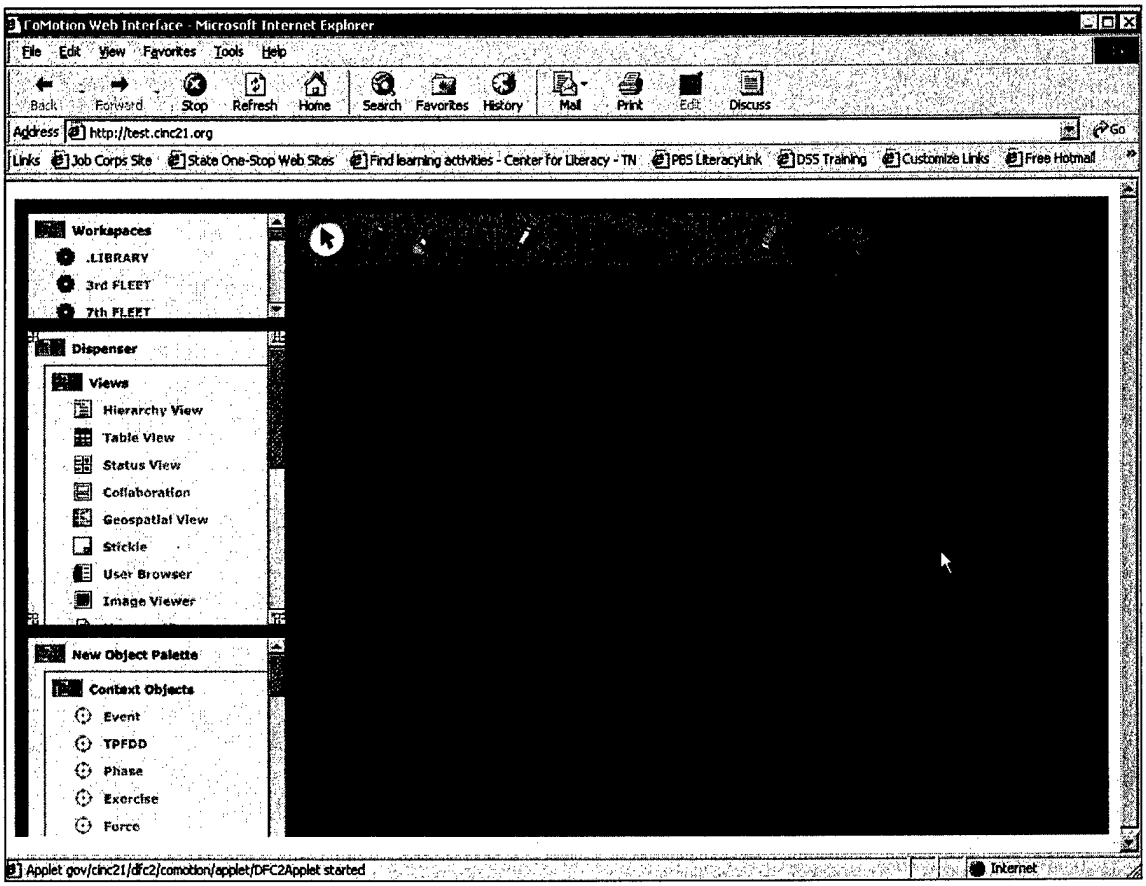

Figure 5-1. Default DFC2 Working Desktop

5.1 Workspaces

The *Workspaces Frame* is normally the first frame that is visible when the user logs in for the first time. Within this frame are two types of workspaces: ***Public*** and ***Private***. As their names indicate, public workspaces can be viewed and manipulated by each user who has access to them. Private workspaces are available only to the user who is logged in using a unique user ID and password. Workspaces are listed in the *Workspaces Frame* in alphabetical order. The DFC2 System Administrator, as necessary, can create new workspaces. Workspaces are used to contain all the data and views that a user will be creating and managing.

An example of a *Workspace Frame*, showing multiple public workspaces and the single private workspace that can be accessed by the user (in this case, the user's name is "Violette Thomas"), is shown in Figure 5-2 below.

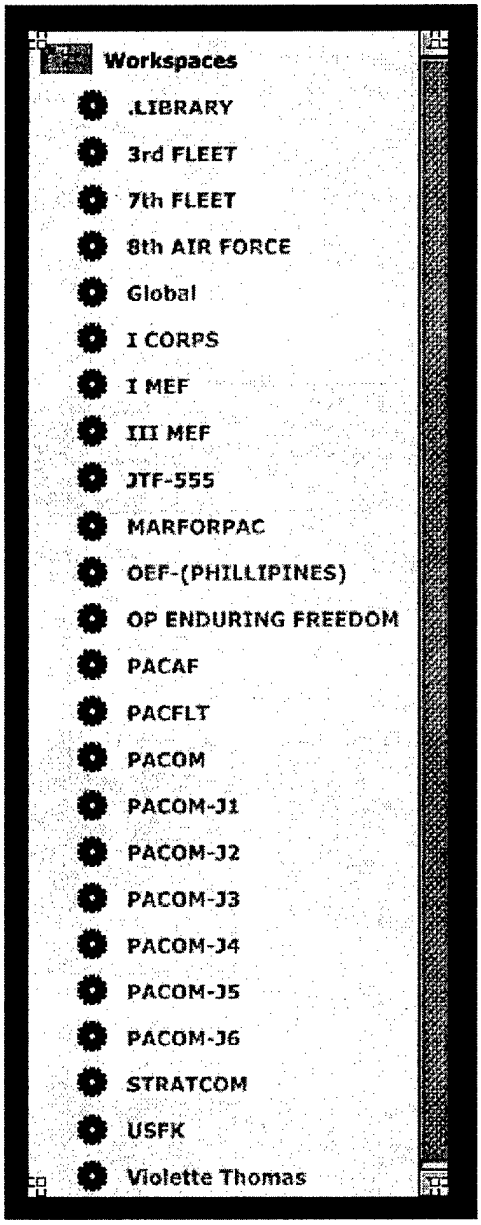

Figure 5-2. Workspaces Frame

Dragging the desired workspace from the *Workspaces Frame* (Figure 5-2) and dropping it onto the desktop will allow the user to open the workspace and have access to the data therein.

5.1.1 Public Workspaces

Public workspaces are those workspaces within an organization (e.g., 3rd Fleet, PACOM, PACOM-J1, etc.). Because multiple users may access public workspaces, it is important to realize that making changes will affect what other users will see. Having public workspaces is beneficial for those who wish to collaborate on a particular issue within a specific workspace.

Dragging a public workspace onto the desktop is illustrated in Figure 5-3 below.

Figure 5-3. Dragging and Dropping a Public Workspace onto the Desktop

5.1.2 Private Workspaces

The private workspace, identified by the name of the user, is reserved for the user whose account is logged in to the system. It is not visible to any other users and cannot be manipulated in any way by others. The user will most likely use this space to construct working scenarios and then move them into the appropriate public workspace when they are ready for viewing and collaborating with other users or for presentation to the decision-maker.

The user's private workspace is dragged to the desktop in the same manner as described for public workspaces above. The user's workspace will look similar to Figure 5-4 below.

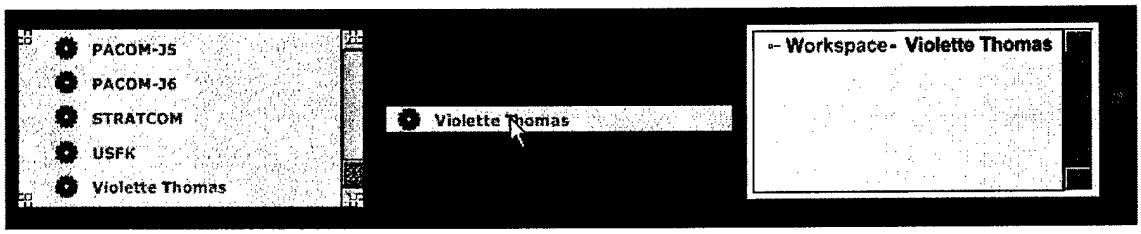

Figure 5-4. Dragging and Dropping a Private Workspace onto the Desktop

5.2 New Object Palette

The *New Object Palette Frame* (Figure 5-5) contains sections with different types of objects. These include: *Context Objects, Decision Objects, Reference Objects,* and *Status Objects.* Objects are the basic building blocks for creating the information that will be stored, managed and displayed. Objects are made up of attributes (fields), which are the characteristics of the object. For example, for the ***folder*** object, the attribute "description" would provide a description of the folder's contents.

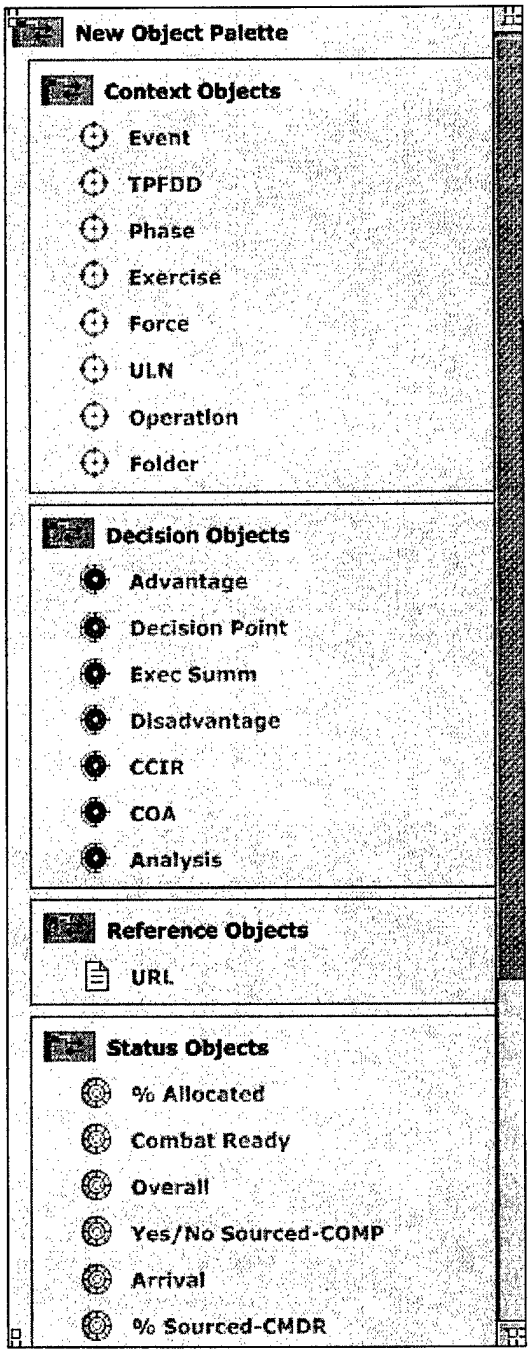

Figure 5-5. New Object Palette

When any of the objects are dragged and dropped into the *workspace* hierarchy, the operation will look similar to Figure 5-6 below. After the object has been placed in the *workspace* hierarchy, it can then be dragged onto the desktop for completion.

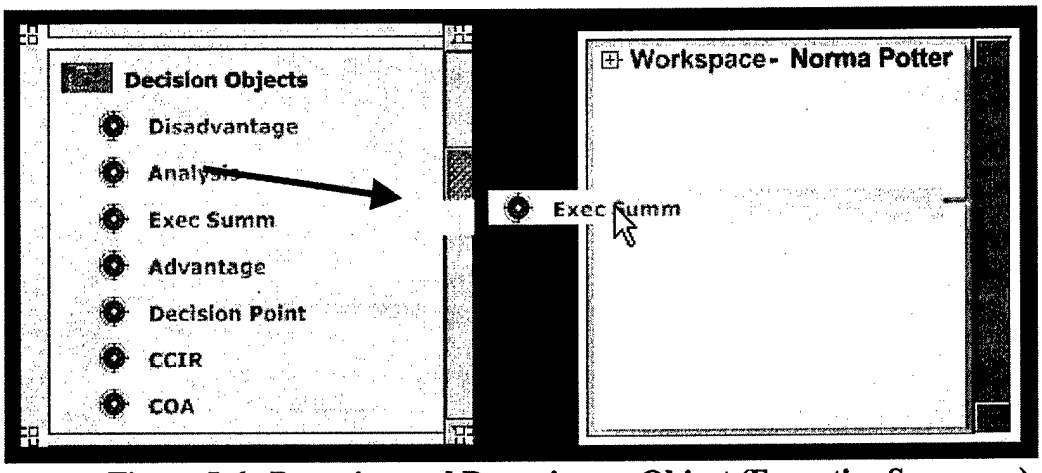

Figure 5-6. Dragging and Dropping an Object (Executive Summary) into a Workspace

The different object types (e.g., folder, event, executive summary, etc.) may have different fields displayed, but they all function similarly. Many of the fields have pull-down menus from which options may be selected. The data that is entered into these fields may be displayed in tables, timelines, and status frames when the object is dragged and dropped into one of these items.

On the right side of each object window are two sets of lists that reflect the position of the object in the hierarchy. For example, the window pictured in Figure 5-7 shows the user's *workspace* (Norma Potter) as the parent to the object and a ***New Decision Point*** object as the child to the ***Executive Summary*** object shown here.

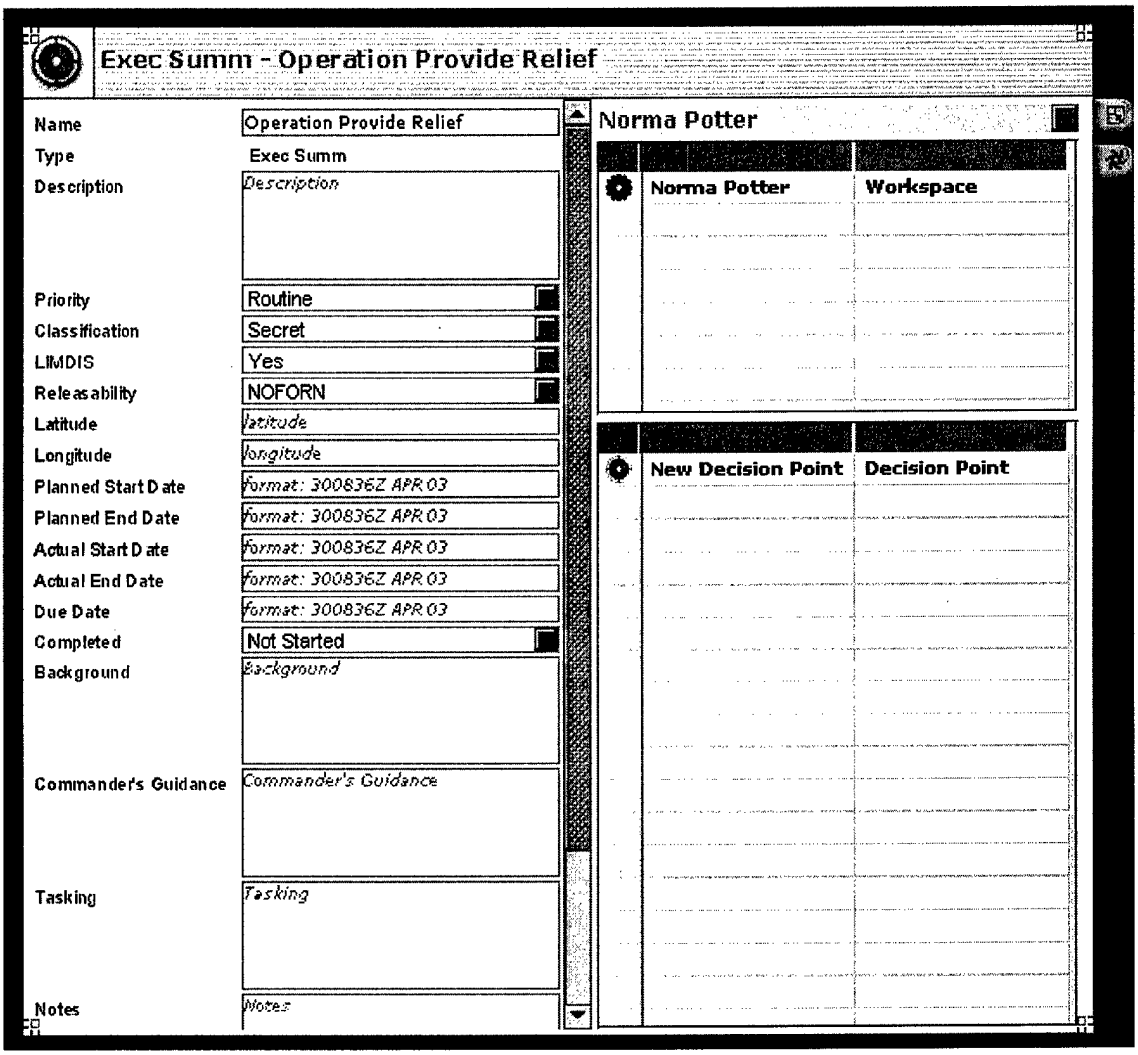

Figure 5-7. Example of an Object Window

All palette objects are initially dragged into a public or private *workspace* (as depicted in Figure 5-6 above) or the *hierarchy* view prior to being populated with data by the user. The name of the object can be changed from the *workspace* or the *hierarchy* view by right clicking on the object name and selecting the ***Rename*** option from the drop-down menu. When the object is dragged from the *workspace* or the *hierarchy* view and dropped onto the desktop, it will look similar to Figure 5-7. The user can populate the object window with data and then dismiss it. The information will persist until the user elects to change or delete it.

Once data has been added to the object window, the object can be dragged from the *workspace* or *hierarchy* frame into *table, status*, or *timeline* views to portray different views of that data. The user may open the object window by dragging it into the desktop area. This allows viewing of all the data fields or for their modification. Any time a change is made to the object, all views (e.g., *table*, *status* or *timeline*) will have the same changes persisted to their contents if that object has been previously placed in any of those views.

 It is important to note that text fields for the objects are not limited to a certain number of characters. Also Date Time Group fields must be entered in the same format as shown in Figure 5-7 (e.g., *300836Z APR 03*) and are case sensitive. Latitude and Longitude must be entered in a specific format and are displayed in Hours/Minutes/Seconds. Latitudes in the southern and eastern hemispheres must be preceded with a minus (-) sign and those in the northern and western hemispheres are listed in positive numbers with no preceding sign. For example a location in Northern Mexico may have the following contents for the Latitude and Longitude fields in the *Operation* or *Event* object:

Latitude: 30.3905601501465
Longitude: -108.273017883301

5.2.1 Context Objects

Context Objects, Figure 5-8, are objects that allow the user to hierarchically organize data in a logical and meaningful way. The different Context Objects available to the user include: ***Event, TPFDD, Phase, Exercise, Force, ULN, Operation, and Folder.***

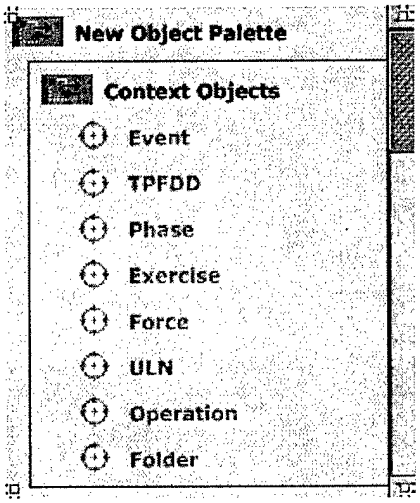

Figure 5-8. Context Objects

As ***Context Objects*** are initially dragged into the *Workspace* or *Hierarchy* view, they will have default generic names, such as *Event – New Event.* Just right click on the existing name, choose ***Rename*** from the drop-down menu, and change the name to something meaningful within the hierarchy. Alternatively, the name can be changed after the ***Context Object*** has been dragged to the desktop for addition of other information.

5.2.1.1 Event Context Object

An ***Event Context Object*** (Figure 5-9) contains information relating to a specific event (any activity occurring at a given place and time). This includes a descriptive **name** of

the event, a **description** of the event, **planned** and **actual dates** of the event, **background** information, the **Commander's Guidance**, as well as other attributes relating to the event.

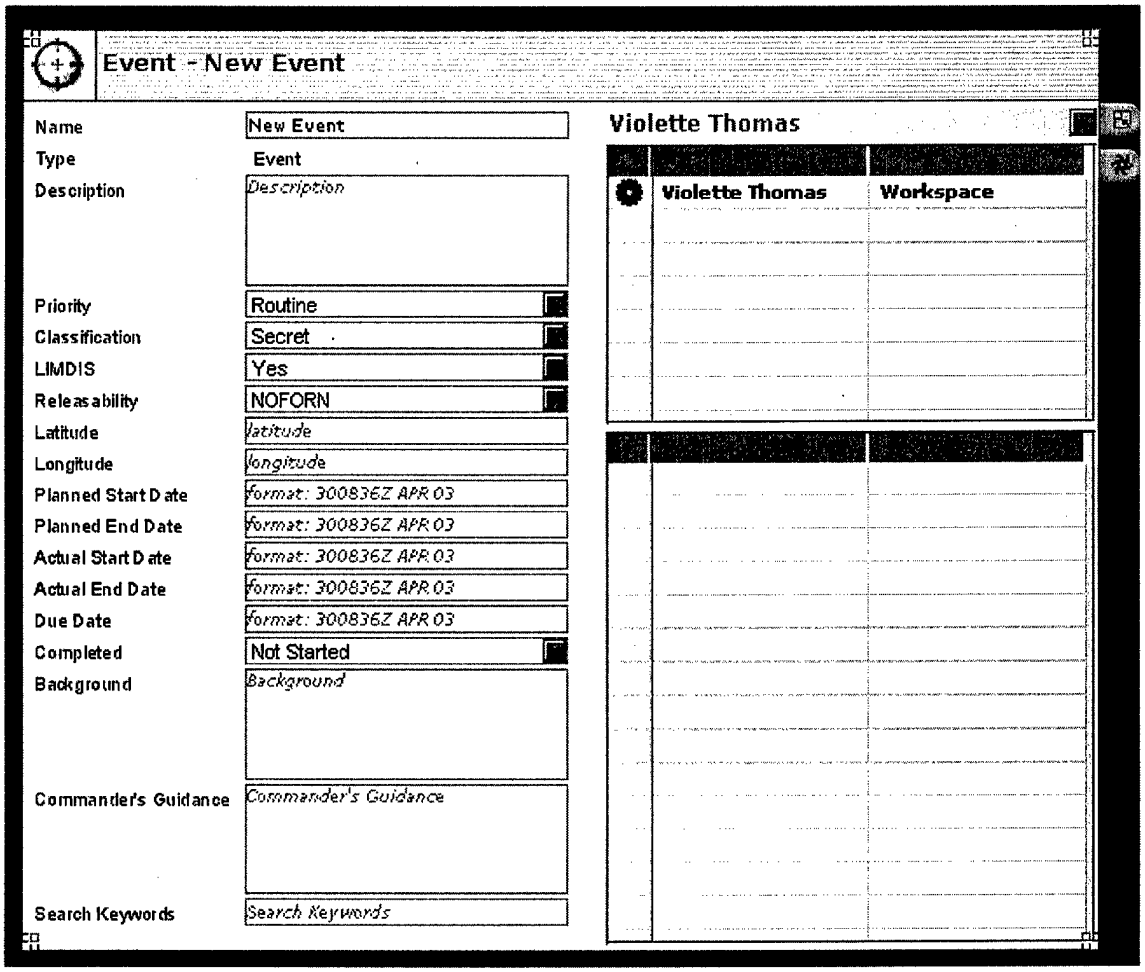

Figure 5-9. New Event Context Object Window

The fields within the ***Event Context Object*** are described in Table 5-1.

Table 5-1. Components of the Event Context Object Window

Field Name	Description
Name	A descriptive name of the event. The user enters or changes the name of the event by highlighting the existing words in the field and typing the new name over the existing one.
Type	The type of context object being displayed, e.g., Event. This field is automatically generated and cannot be changed.
Description	A description of the event.
Priority	Choose from Priority, Routine or Urgent.
Classification	Choose from Confidential, Secret, Top Secret, or Unclassified.
LIMDIS	Limited Distribution; choose Yes or No.

Field Name	Description
Releasability	Indicates to whom the information is releasable. Choose from AUSNZUKCAN, NATO, NOFORN, RELJAPAN, RELROK, or Thailand.
Latitude	Latitude at which the event is taking place (e.g., 30.3905601501465).
Longitude	Longitude at which the event is taking place. (e.g. -108.273017883301).
Planned Start Date	The DTG of the planned start of the event.
Planned End Date	The DTG of the planned end of the event.
Actual Start Date	The DTG of the actual start of the event.
Actual End Date	The DTG of the actual end of the event.
Due Date	The DTG of the date by which the event is due to be completed.
Completed	Denotes the status of the event. Choose from Completed, In Progress, or Not Started.
Background	A description detailing the background leading up to the event.
Commander's Guidance	A brief note pertaining to the Commander's Guidance for the event.
Search Keywords	List keywords pertaining to the event.

5.2.1.2 TPFDD Context Object

The ***TPFDD Context Object*** (Figure 5-10) is the object in which ***Time-Phased Force and Deployment Data*** is displayed. This is the Joint Operation Planning and Execution System (JOPES) database portion of an operation plan. It contains time-phased force data, non-unit related cargo and personnel data, and movement data for the operation plan, including:

- In-place units.
- Units to be deployed to support the operation plan with a priority indicating the desired sequence for their arrival at the port of debarkation.
- Routing of forces to be deployed.
- Movement data associated with deploying forces.
- Estimates of non-unit-related cargo and personnel movements to be conducted concurrently with the deployment of forces.
- Estimate of transportation requirements that must be fulfilled by common-user lift resources as well as those requirements that can be fulfilled by assigned or attached transportation resources.

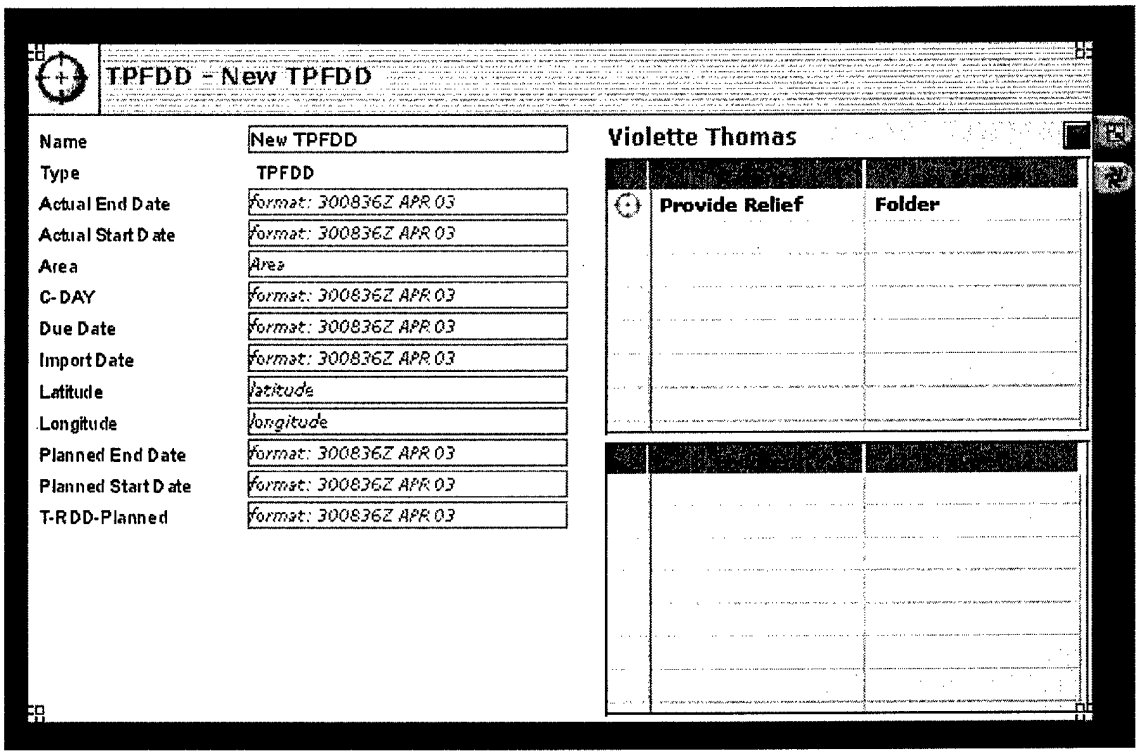

Figure 5-10. New TPFDD Context Object Window

The fields within the ***TPFDD Context Object*** are described in Table 5-2.

Table 5-2. Components of the TPFDD Context Object Window

Field Name	Description
Name	A descriptive name for the TPFDD. The user enters the name by highlighting the words "New TPFDD" in the field and typing the new name over the existing one.
Type	The type of context object being displayed, e.g. TPFDD. This field is automatically generated and cannot be changed.
Actual End Date	The DTG of the actual end of the deployment.
Actual Start Date	The DTG of the actual start of the deployment.
Area	A description of the area in which the deployment will occur.
C-Day	The DTG that the deployment will commence.
Due Date	The DTG by which the deployment is due to be completed.
Import Date	The DTG when the TPFDD is ingested into DFC2
Latitude	Latitude of the deployment location (e.g., 30.3905601501465).
Longitude	Longitude of the deployment location (e.g., -108.273017883301).
Planned End Date	The DTG of the planned end of the deployment.
Planned Start Date	The DTG of the planned start of the deployment.
T-RDD-Planned	Required Delivery Date--The calendar date when material is required by the requisitioner.

5.2.1.3 Phase Context Object

A ***Phase Context Object*** (Figure 5-11) contains a sequenced activity related to an operation. Phases are the "steps" or order of activities upon which an operation is planned and carried out. Although similar to the ***Event Context Object***, the ***Phase Context Object*** contains fields for the Commander's Intent and Guidance and Tasking information.

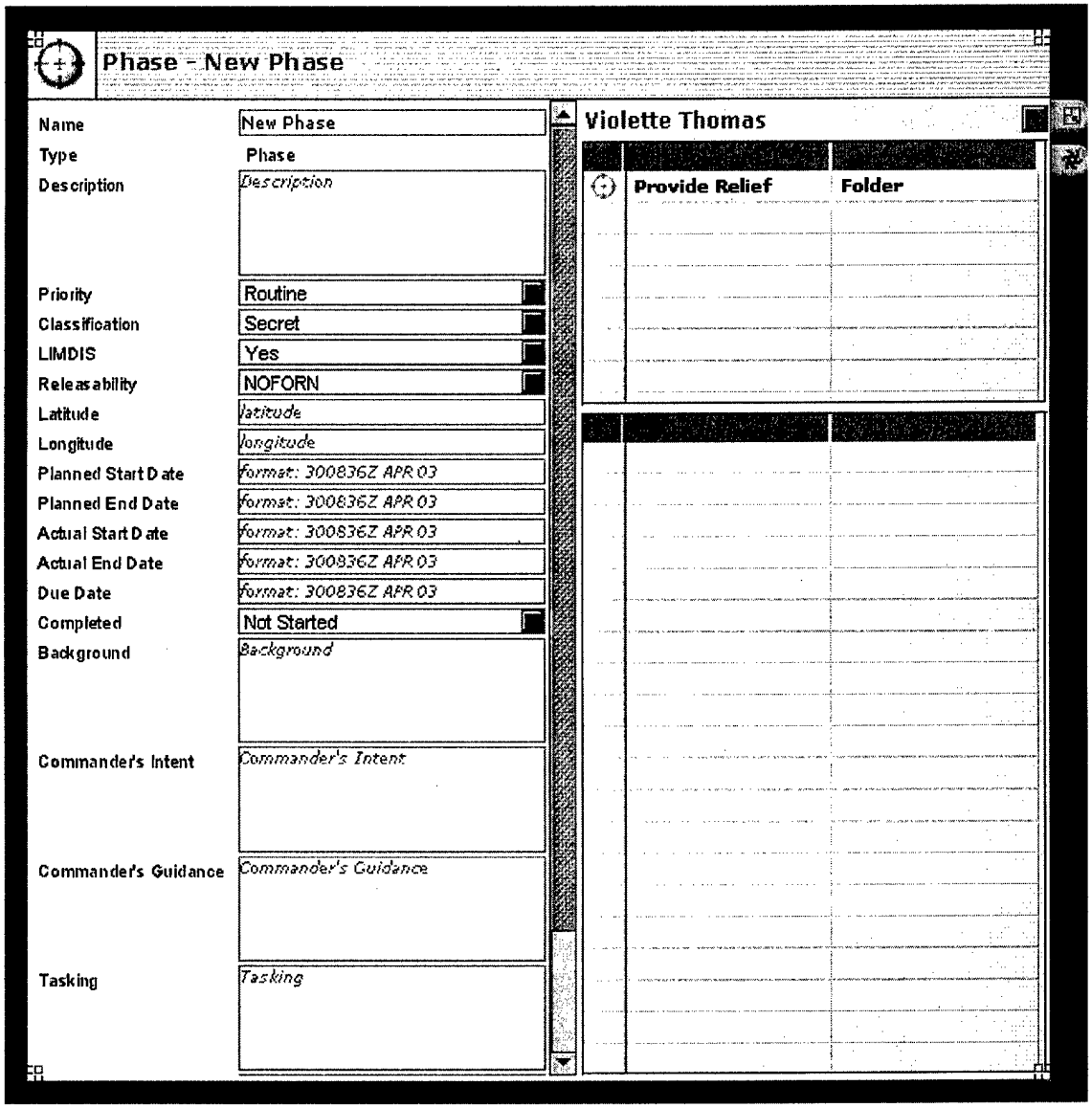

Figure 5-11. New Phase Context Object Window

The fields within the ***Phase Context Object*** are described in Table 5-3.

Table 5-3. Components of the Phase Context Object Window

Field Name	Description
Name	A descriptive name for the Phase. The user enters the name by highlighting the words "New Phase" in the field and typing the new name over the existing one.
Type	The type of Context Object being displayed, i.e., Phase. This field is automatically generated and cannot be changed.
Description	A description of the Phase.
Priority	Choose from Priority, Routine or Urgent.
Classification	Choose from Confidential, Secret, Top Secret, or Unclassified.
LIMDIS	Limited Distribution, choose Yes or No.
Releasability	Indicates to whom the information is releasable. Choose from AUSNZUKCAN, NATO, NOFORN, RELJAPAN, RELROK, or Thailand.
Latitude	Latitude of the phase location. (e.g., 30.3905601501465).
Longitude	Longitude of the phase location. (e.g., -108.273017883301).
Planned Start Date	The DTG of the planned start of the phase.
Planned End Date	The DTG of the planned end of the phase.
Actual Start Date	The DTG of the actual start of the phase.
Actual End Date	The DTG of the actual end of the phase.
Due Date	The DTG of the date by which the phase is due to be completed.
Completed	Denotes the status of the phase. Choose from Completed, In Progress, or Not Started.
Background	A description detailing the background leading up to the phase.
Commander's Intent	A description of the Commander's Intent for the phase.
Commander's Guidance	A brief note pertaining to the Commander's Guidance for the event.
Tasking	Specific tasking that pertains to the phase.

5.2.1.4 Exercise Context Object

An ***Exercise Context Object*** (Figure 5-12) contains dates and locations of a specific exercise. An exercise is a planned military activity, usually initiated to test the feasibility of a contingency plan or to effect specific training for a given command or joint endeavor.

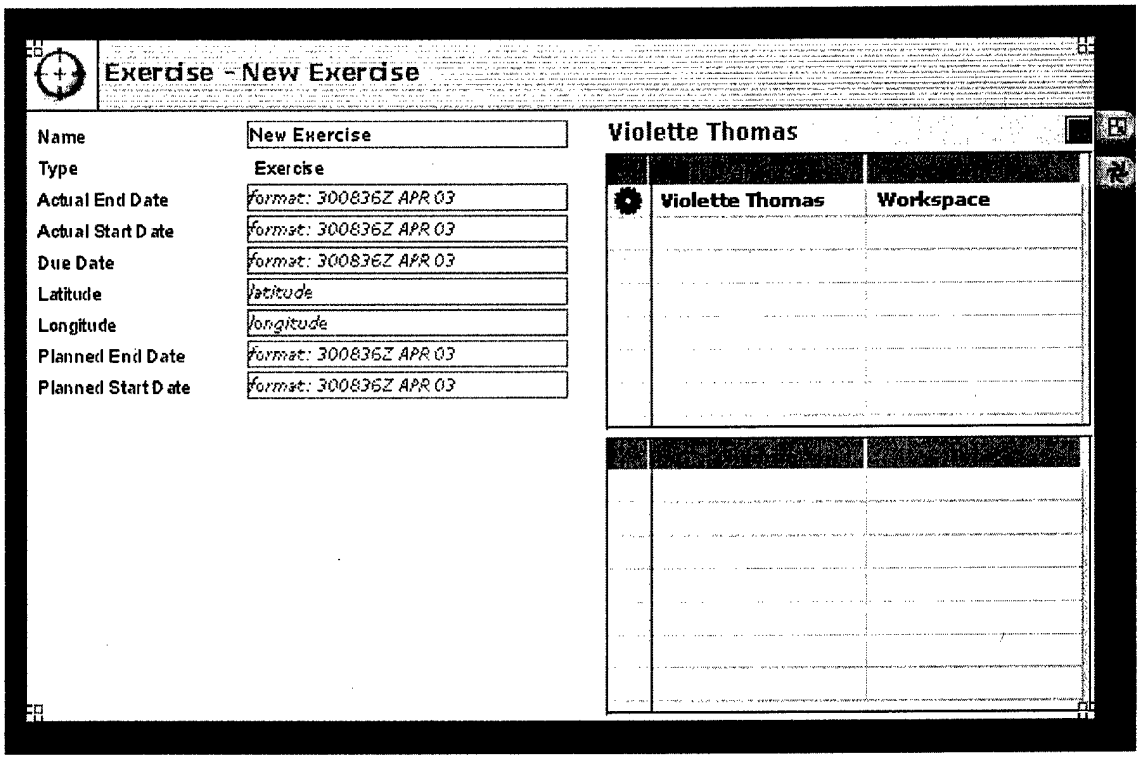

Figure 5-12. New Exercise Context Object Window

The fields within the ***Exercise Context Object*** are described in Table 5-4.

Table 5-4. Components of the Exercise Context Object Window

Field Name	Description
Name	A descriptive name for the exercise. The user enters the name by highlighting the words "New Exercise" in the field and typing the new name over the existing one.
Type	The type of context object being displayed, e.g., Exercise. This field is automatically generated and cannot be changed.
Actual End Date	The DTG of the actual end of the exercise.
Actual Start Date	The DTG of the actual start of the exercise.
Latitude	The latitude of the exercise location (e.g., 30.3905601501465).
Longitude	The longitude of the exercise location. (e.g., -108.273017883301)
Planned Start Date	The DTG of the planned start of the exercise.
Planned End Date	The DTG of the planned end of the exercise.

5.2.1.5 Force Context Object

A ***Force Context Object*** (Figure 5-13) contains information on subordinate units of a given military command applied to a specific operation, phase or exercise. The

information in this object contains the basic exercise object information, location, date/time, etc., and force information such as Sourced-CMDR ULN count, UIC, Validated ULN Count, etc.

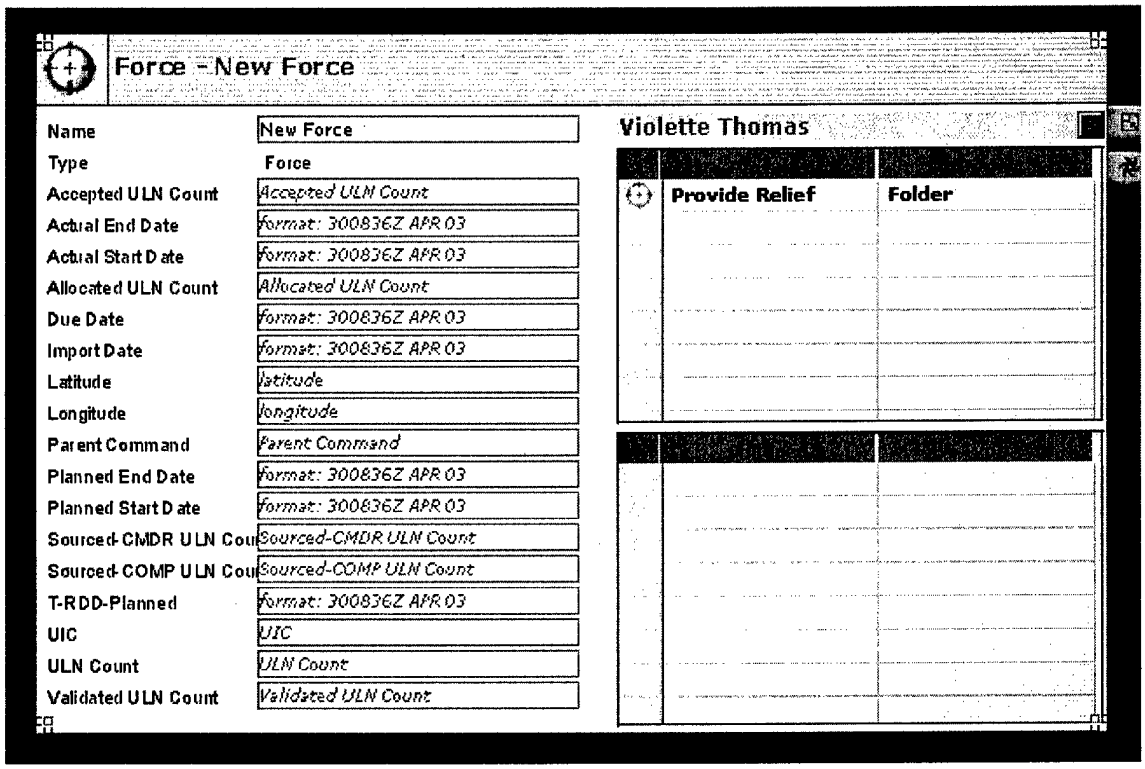

Figure 5-13. New Force Context Object Window

The fields within the ***New Force Context Object*** are described in Table 5-5.

Table 5-5. Components of the Force Context Object Window

Field Name	Description
Name	A descriptive name for the Force. The user enters the name by highlighting the words "New Force" in the field and typing the new name over the existing one.
Type	The type of context object being displayed, e.g., Force. This field is automatically generated and cannot be changed.
Accepted ULN Count	Number of units acceptable in this Force (command).
Actual End Date	The DTG of the actual end date of the operation, phase, or exercise.
Actual Start Date	The DTG of the actual start date of the operation, phase, or exercise.
Allocated ULN Count	Number of units that have been allocated to this Force (command).
Due Date	The DTG of the date by which the operation, phase or exercise is to be completed.

Field Name	Description
Import Date	The DTG when the Force object is ingested into DFC2.
Latitude	The Latitude of the operation, phase, or exercise location (e.g., 30.3905601501465).
Longitude	The Longitude of the operation, phase, or exercise location (e.g., -108.273017883301).
Parent Command	The parent command of the force.
Planned End Date	The DTG of the planned end of the operation, phase, or exercise.
Planned Start Date	The DTG of the planned start of the operation, phase, or exercise.
Sourced CMDR ULN Count	The # of ULNs within a force that have a positive Sourced CMDR value.
Sourced COMP ULN Count	The # of ULNs within a force that have a positive Sourced COMP value.
T-RDD-Planned	Required Delivery Date--The calendar date when material is required by the requisitioner.
UIC	Unit Identification Code. A six-character, alphanumeric code that uniquely identifies each Active, Reserve, and National Guard unit of the Armed Forces.
ULN Count	The Unit Line Number denoting the number of units assigned to the Force.
Validated ULN Count	Validation of the number of units assigned to the Force. A seven-character, alphanumeric field that uniquely describes a unit entry (line) in a Joint Operation Planning and Execution System time-phased force and deployment data.

5.2.1.6 ULN Context Object

A ***ULN Context Object*** (Figure 5-14) contains information relating to a specific unit. The Unit Line Number is a seven-character, alphanumeric field that uniquely describes a unit entry (line) in a JOPES time-phased force and deployment data context. The ***ULN Context Object*** contains information specific to a particular ULN, i.e. unit's name, location of unit, unit's parent command, etc. A ULN can represent a major force or a requirement as small as a single individual.

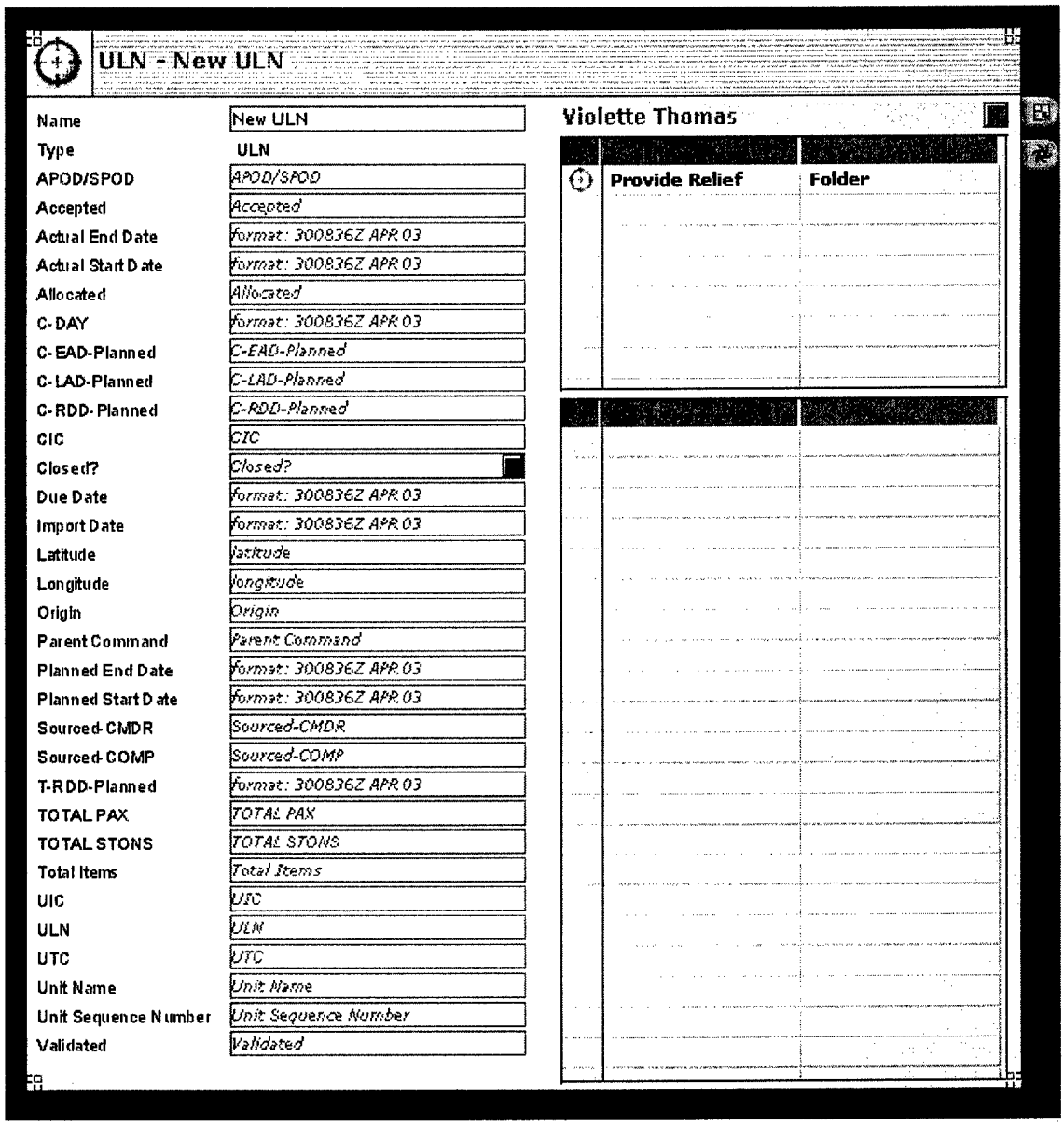

Figure 5-14. New ULN Context Object Window

The fields within the ***ULN Context Object*** are described in Table 5-6.

Table 5-6. Components of the ULN Context Object Window

Field Name	Description
Name	A descriptive name for the ULN. The user enters the name by highlighting the words "New ULN" in the field and typing the new name over the existing one.
Type	The type of context object being displayed, e.g., ULN. This field is automatically generated and cannot be changed.
APOD/SPOD	The Airlift or Sealift Port of Debarkation.
Accepted	Lift Providers Accept for Scheduling.

Field Name	Description
Actual End Date	The DTG of the actual end date of the operation, phase, or exercise.
Actual Start Date	The DTG of the actual start date of the operation, phase, or exercise.
Allocated	Airlift missions allocated to ULN's.
C-Day	The DTG of the date the operation will commence.
C-EAD-Planned	Earliest Arrival Date. A day, relative to C-day, that is specified by a planner as the earliest date when a unit, a resupply shipment, or replacement personnel can arrive and complete unloading at the port of debarkation and support the operations.
C-LAD-Planned	Latest Arrival Date. A day, relative to C-day, that is specified by a planner as the latest date when a unit, a resupply shipment, or replacement personnel can arrive and complete unloading at the port of debarkation and support the operations.
C-RDD-Planned	Commander's Required Delivery Date.
CIC	Carrier Unique Identification Code.
Closed	Select True or False.
Due Date	The DTG of the date by which the ULN is due to be completed.
Import Date	The DTG of when the object is ingested into DFC2.
Latitude	The latitude of the ULN location (e.g., 30.3905601501465).
Longitude	The longitude of the ULN location (e.g., -108.273017883301).
Origin	Origin location of the ULN.
Parent Command	The parent command of the ULN.
Planned End	The DTG of the planned end date for the ULN.
Planned Start	The DTG of the planned start date of the ULN.
Sourced CMDR	Supported Command Component Confirms Mission Requirements Met.
Sourced COMP	Force Provider Verifies Sourcing. Also means the forces have been alerted for deployment.
T-RDD-Planned	Required Delivery Date--The calendar date when material is required by the requisitioner.
Total PAX	Total number of passengers for the ULN.
Total STONS	Total number of short tons for the ULN.
Total Items	Total number of items for the ULN.
UIC	List the Unit Identification Code.
ULN	List the Unit Line Number.
UTC	List the Unit Type Code. A five-character, alphanumeric code that uniquely identifies each unit type of the Armed Forces.

Field Name	Description
Unit Name	List the Unit Name.
Unit Sequence Number	List the Unit Sequence Number.
Validated	Supported Commander Validates requirements for transportation scheduling.

5.2.1.7 Operation Context Object

An ***Operation Context Object*** (Figure 5-15) contains high-level information relating to a specific operation (planned activity by a military or naval force such as maneuver or campaign). This object describes the location of the operation, the timing of the operation (both planned and actual), background, mission, commander's intent, commander's guidance, etc.

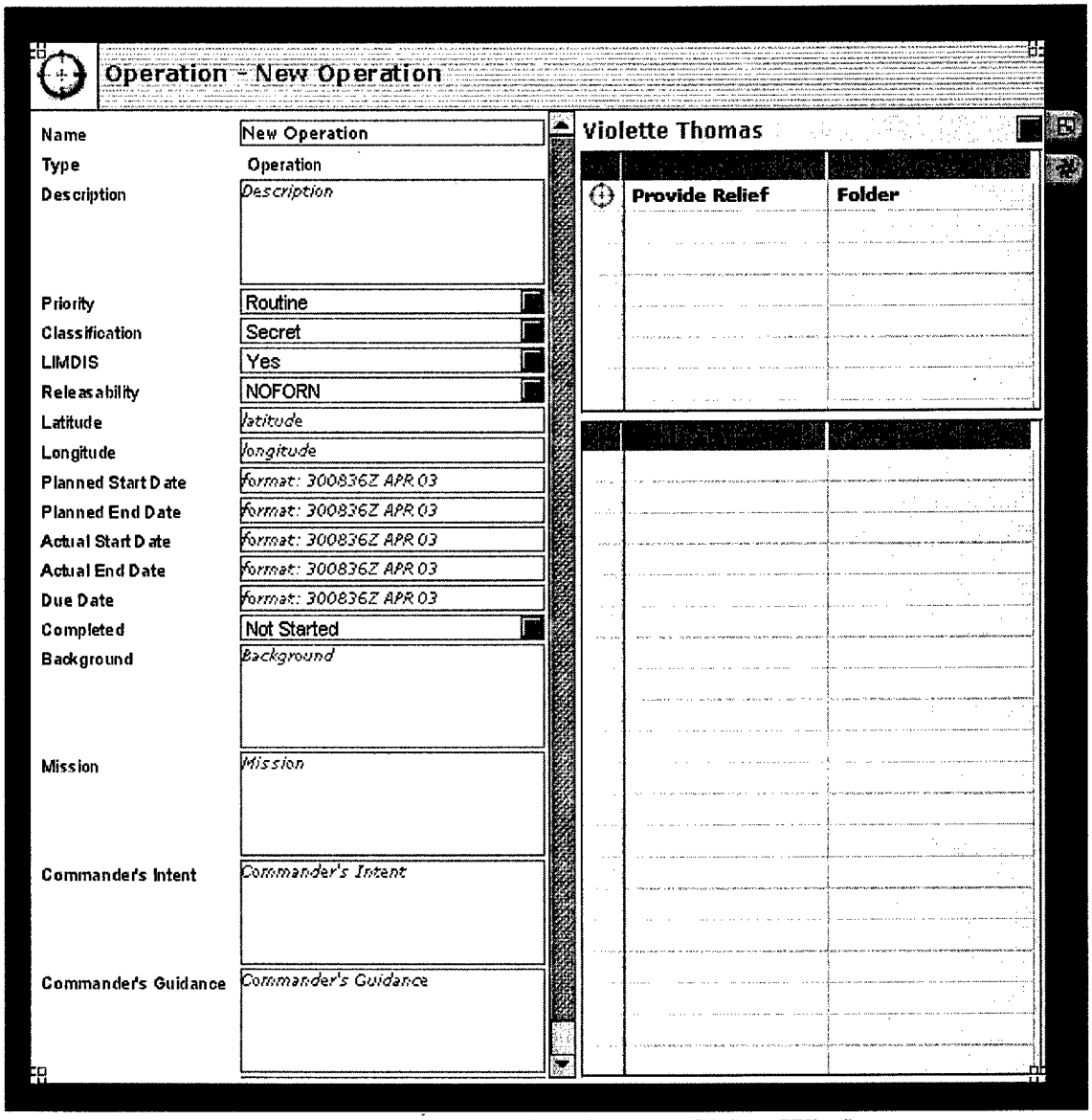

Figure 5-15. New Operation Context Object Window

The fields within the ***Operation Context Object*** are described in Table 5-7.

Table 5-7. Components of the Operation Context Object Window

Field Name	Description
Name	A descriptive name of the operation. The user enters or changes the name of the operation by highlighting the existing words in the field and typing the new name over the existing one.
Type	The type of context object being displayed, e.g., Operation. This field is automatically generated and cannot be changed.
Description	A description of the operation.
Priority	Choose from Priority, Routine or Urgent.
Classification	Choose from Confidential, Secret, Top Secret, or Unclassified.
LIMDIS	Limited Distribution, Choose Yes or No.
Releasability	Indicates to whom the information is releasable. Choose from AUSNZUKCAN, NATO, NOFORN, RELJAPAN, RELROK, or Thailand.
Latitude	Latitude at which the operation is taking place (e.g., 30.3905601501465).
Longitude	Longitude at which the operation is taking place (e.g., -108.273017883301).
Planned Start Date	The DTG of the planned start of the operation.
Planned End Date	The DTG of the planned end of the operation.
Actual Start Date	The DTG of the actual start of the operation.
Actual End Date	The DTG of the actual end of the operation.
Due Date	The DTG of the date by which the operation is due to be completed.
Completed	Denotes the status of the operation. Choose from Completed, Not Started, or In Progress,
Background	A description detailing the background leading up to the operation.
Mission	A description of the mission.
Commander's Intent	A summary of the Commander's Intent for the operation.
Commander's Guidance	A brief note pertaining to the Commander's Guidance for the operation.

5.2.1.8 Folder Context Object

The ***Folder Context Object*** (Figure 5-16) is an organization tool used to store related objects in the DFC2 workspace. The ***Folder Context Object*** is similar to a file folder in a Microsoft Windows file structure environment.

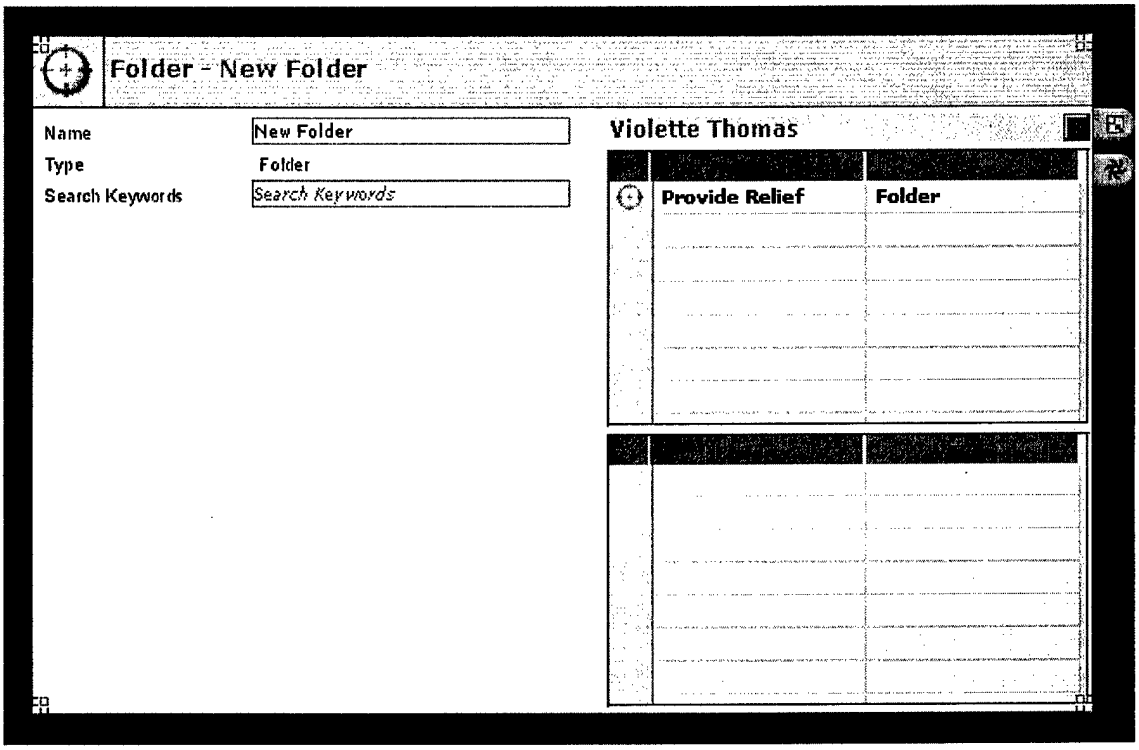

Figure 5-16. New Folder Object Window

The fields within the ***Folder Context Object*** are described in Table 5-8.

Table 5-8. Components of the Folder Context Object Window

Field Name	Description
Name	A descriptive name pertaining to the folder's contents. The user enters or changes the name of the folder by highlighting the existing words in the field and typing the new name over the existing one.
Type	The type of context object being displayed, e.g., Folder. This field is automatically generated and cannot be changed.
Search Keywords	List keywords descriptive of the folder's contents. Keywords will allow this folder to be found when a search is conducted for this kind of information.

5.2.2 Decision Objects

Decision Objects, Figure 5-17, are objects that allow the user to hierarchically organize decision data in a logical and meaningful way. The different ***Decision Objects*** available to the user include: ***Advantage, Decision Point, Exec Summ, Disadvantage, CCIR, COA, and Analysis.***

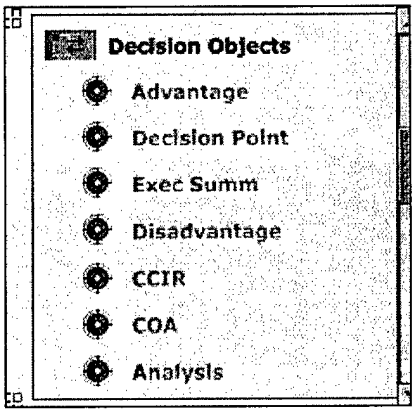

Figure 5-17. Decision Objects

As ***Decision Objects*** are initially dragged into the *Workspace* or *Hierarchy* view, they will have default generic names, such as *Decision Point – New Decision Point.* To change the name of a ***Decision Object***, right click on the existing name, choose ***Rename*** from the drop-down menu, and change the name to something meaningful within the hierarchy. Alternatively, the name can be changed after the ***Decision Object*** has been dragged to the desktop for addition of other information.

5.2.2.1 Advantage Decision Object

The ***Advantage Decision Object*** (Figure 5-18) pertains to the specific advantages of a given Course of Action (COA) that has been generated by staff analysis.

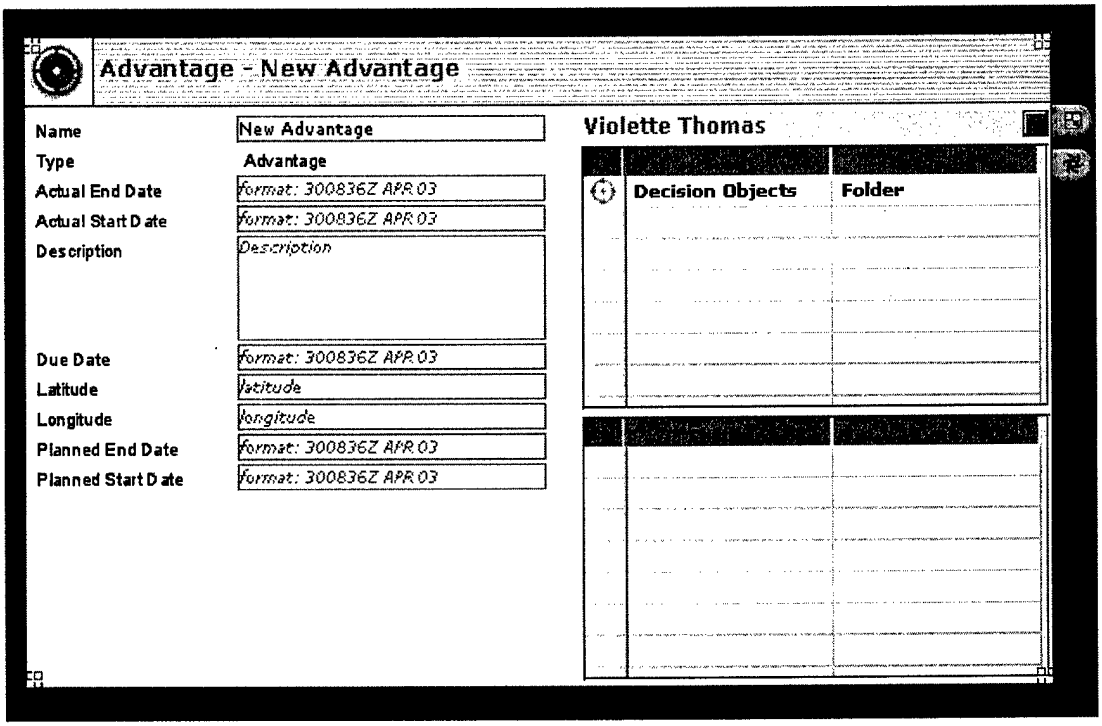

Figure 5-18. Advantage Decision Object Window

The fields within the ***Advantage Decision Object*** are described in Table 5-9.

Table 5-9. Components of the Advantage Decision Object Window

Field Name	Description
Name	A descriptive name pertaining to the Advantage Decision Object's contents. The user enters or changes the name of the Decision Object by highlighting the existing words in the field and typing the new name over the existing one.
Type	The type of Decision Object being displayed, e.g., Advantage. This field is automatically generated and cannot be changed.
Actual End Date	The DTG of the actual end of the COA to which the advantage applies.
Actual Start Date	The DTG of the actual start of the COA to which the advantage applies.
Description	A description of the advantage.
Due Date	The DTG of the due date of the COA to which the advantage applies.
Latitude	The latitude of the COA to which the advantage applies (e.g., 30.3905601501465).
Longitude	The longitude of the COA to which the advantage applies (e.g., -108.273017883301).
Planned End Date	The DTG of the planned end of the COA to which the advantage applies.
Planned Start Date	The DTG of the planned start of the COA to which the advantage applies.

5.2.2.2 Decision Point Decision Object

The ***Decision Point Decision Object*** (Figure 5-19) relates to events, times or locations on the battlefield where tactical decisions are required during mission execution. Decision points do not dictate what the decision is -- only that one must be made -- and when and where it should be made. In DFC2 planning, ***Decision Points*** drive the generation of CCIRs and set the context for the gathering of information necessary for decision shaping.

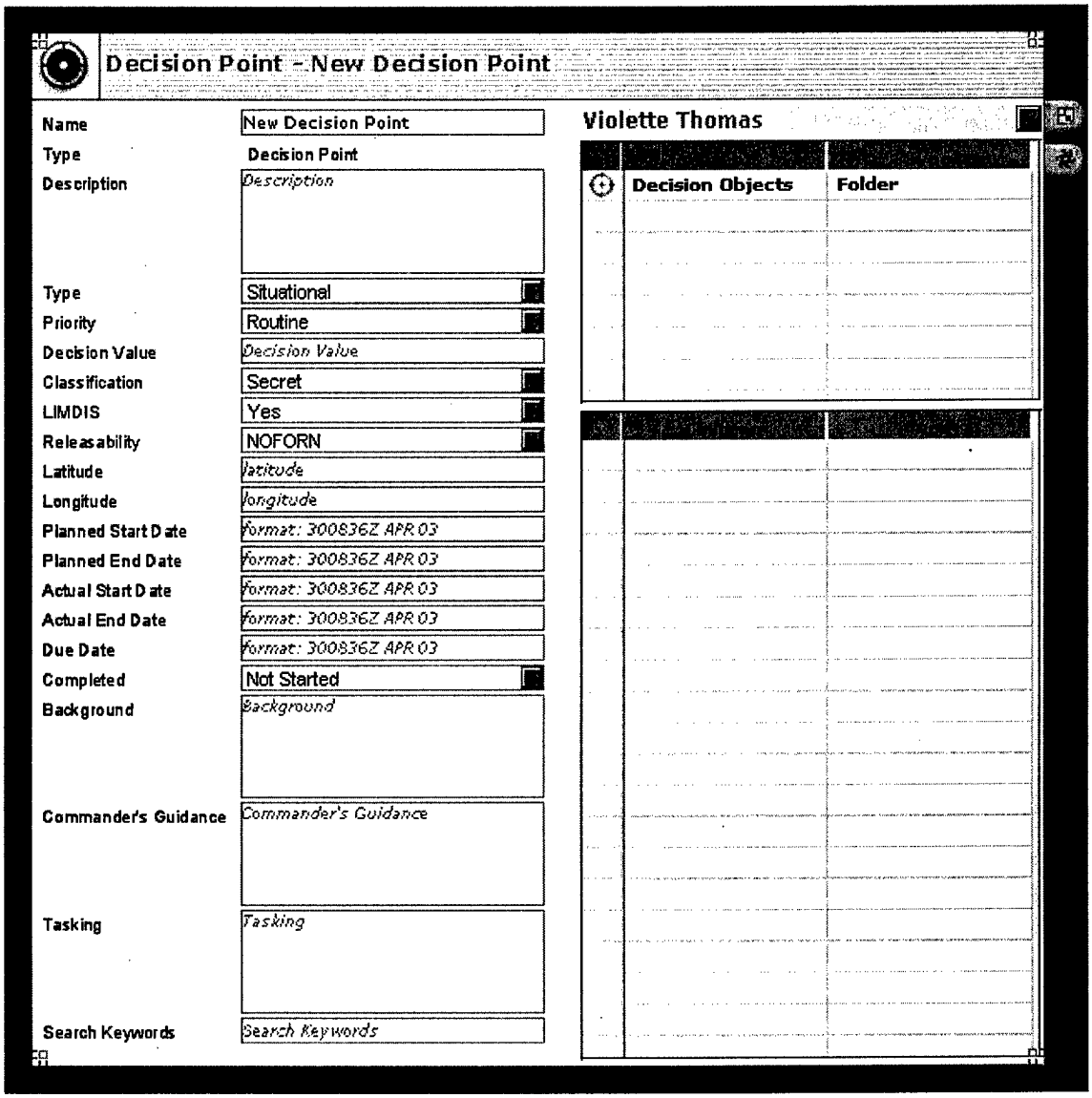

Figure 5-19. Decision Point Decision Object Window

The fields within the ***Decision Point Decision Object*** are described in Table 5-10.

Table 5-10. Components of the Decision Point Decision Object Window

Field Name	Description
Name	A descriptive name pertaining to the Decision Point Decision Object's contents. The user enters or changes the name of the folder by highlighting the existing words in the field and typing the new name over the existing one.
Type	The type of context object being displayed, e.g., Decision Point. This field is automatically generated and cannot be changed.
Description	A description of the decision point.
Type	Choose Situational or Standing.

Field Name	Description
Priority	Choose Priority, Routine, or Urgent.
Decision Value	Not used at this time.
LIMDIS	Limited Distribution. Choose Yes or No.
Releasability	Indicates to whom the information is releasable. Choose from AUSNZUKCAN, NATO, NOFORN, RELJAPAN, RELROK, or Thailand.
Latitude	Latitude at which the decision point is taking place (e.g., 30.3905601501465).
Longitude	Longitude at which the decision point is taking place (e.g., -108.273017883301).
Planned Start Date	The DTG of the planned start of the decision point.
Planned End Date	The DTG of the planned end of the decision point.
Actual Start Date	The DTG of the actual start of the decision point.
Actual End Date	The DTG of the actual end of the decision point.
Due Date	The DTG of the date by which the decision point is due.
Completed	Denotes the status of the operation. Choose from Completed, Not Started, or In Progress.
Background	A description detailing the background leading up to the decision point.
Commander's Guidance	A brief note pertaining to the Commander's Guidance for the decision point.
Tasking	Specific tasking that pertains to the decision point.
Search Keywords	List keywords pertaining to the decision point. Keywords will allow this decision point to be found when a search is conducted for this kind of information.

5.2.2.3 Executive Summary Decision Object

The ***Executive Summary Decision Object,*** Figure 5-20, is used to contain all of the objects and views required for display in an *Executive Summary Viewer.*

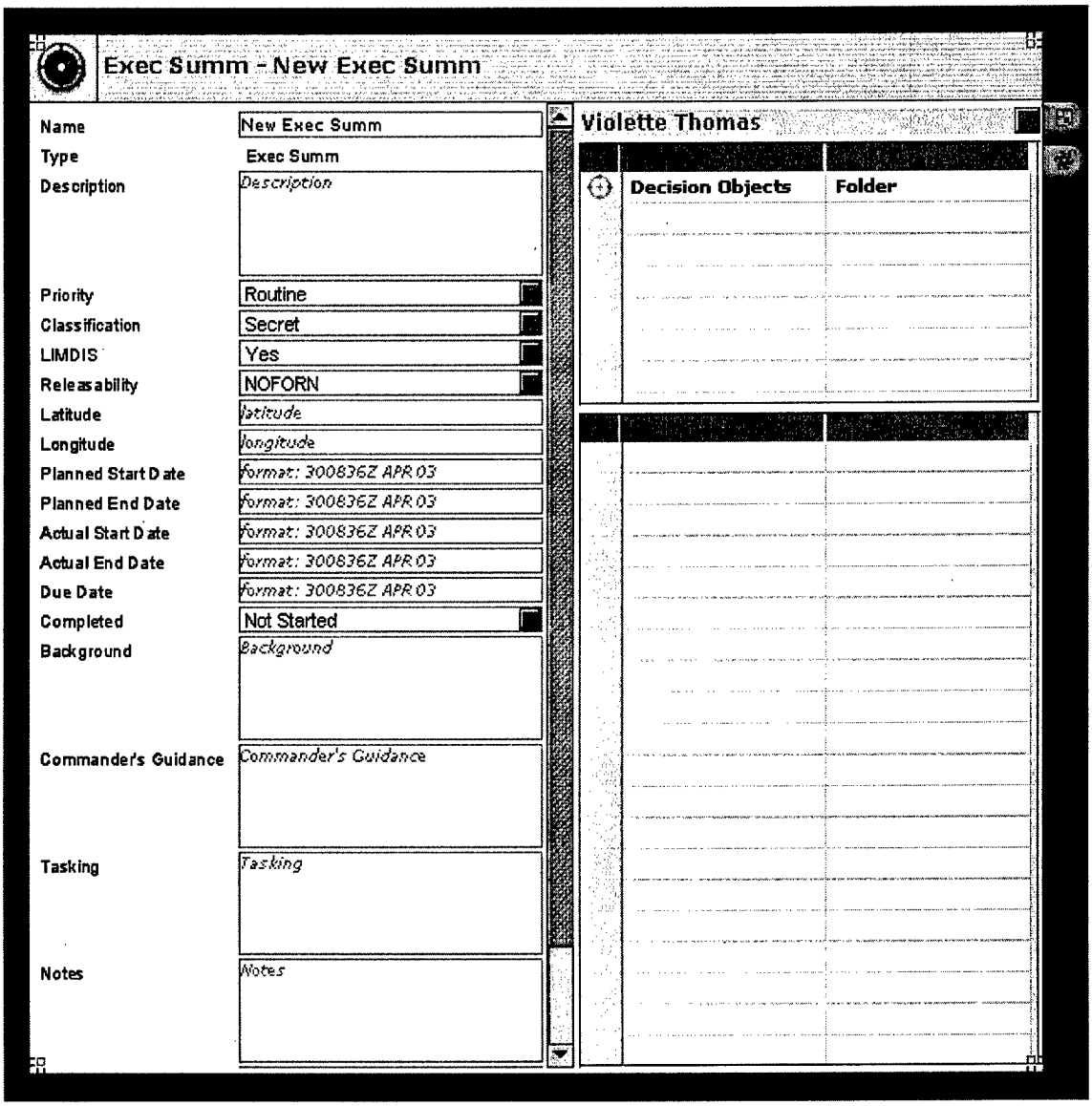

Figure 5-20. Executive Summary Decision Object Window

The fields within the ***Executive Summary Decision Object*** are described in Table 5-11.

Table 5-11. Components of the Executive Summary Object Window

Field Name	Description
Name	A descriptive name pertaining to the Executive Summary Decision Object's contents. The user enters or changes the name of the Executive Summary Decision Object by highlighting the existing words in the field and typing the new name over the existing one.
Type	The type of Decision Object being displayed, e.g., Exec Summ. This field is automatically generated and cannot be changed.
Description	A description of the Executive Summary.

Field Name	Description
Priority	Choose Priority, Routine, or Urgent.
Classification	Choose from Confidential, Secret, Top Secret, or Unclassified.
LIMDIS	Limited Distribution, Choose Yes or No.
Releasability	Indicates to whom the information is releasable. Choose from AUSNZUKCAN, NATO, NOFORN, RELJAPAN, RELROK, or Thailand.
Latitude	Latitude at which the mission is taking place (e.g., 30.3905601501465).
Longitude	Longitude at which the mission is taking place (e.g., -108.273017883301).
Planned Start Date	The DTG of the planned start of the mission.
Planned End Date	The DTG of the planned end of the mission.
Actual Start Date	The DTG of the actual start of the mission.
Actual End Date	The DTG of the actual end of the mission.
Due Date	The DTG of the date by which mission completion is due.
Completed	Denotes the status of the mission. Choose from Completed, Not Started, or In Progress.
Background	A description detailing the background leading up to the mission.
Commander's Guidance	A brief note pertaining to the Commander's Guidance for the mission.
Tasking	Specific tasking that pertains to the mission.
Notes	Additional notes relevant to the mission.

5.2.2.4 Disadvantage Decision Object

The ***Disadvantage Decision Object*** (Figure 5-21) pertains to the specific disadvantages of a given COA generated by staff analysis.

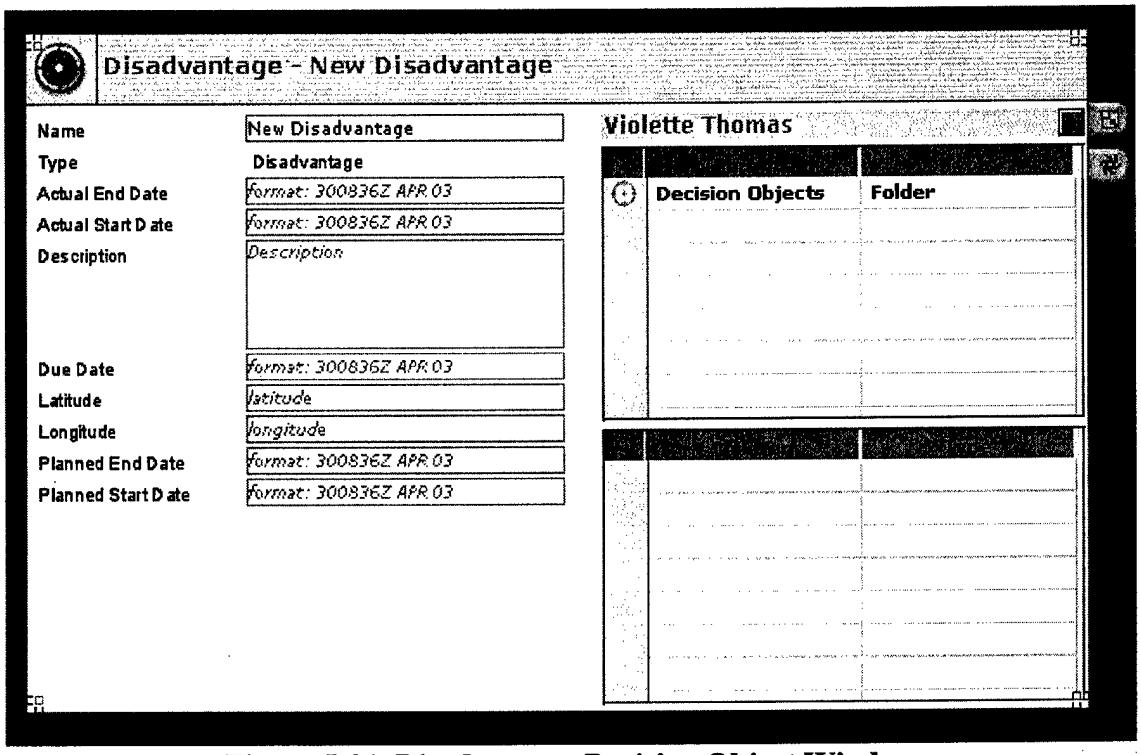

Figure 5-21. Disadvantage Decision Object Window

The fields within the ***Disadvantage Decision Object*** are described in Table 5-12.

Table 5-12. Components of the Disadvantage Decision Object Window

Field Name	Description
Name	A descriptive name pertaining to the Disadvantage Decision Object's contents. The user enters or changes the name of the Disadvantage Decision Object by highlighting the existing words in the field and typing the new name over the existing one.
Type	The type of Decision Object being displayed, e.g., Disadvantage. This field is automatically generated and cannot be changed.
Actual End Date	The DTG of the actual end of the mission to which the disadvantage applies.
Actual Start Date	The DTG of the actual start of the mission to which the disadvantage applies.
Description	A description of the disadvantage.
Due Date	The DTG of the due date of the mission to which the disadvantage applies.
Latitude	Latitude of the mission to which the disadvantage applies (e.g., 30.3905601501465).
Longitude	Longitude of the mission to which the disadvantage applies (e.g., -108.273017883301).

Field Name	Description
Planned End Date	The DTG of the planned end of the mission to which the disadvantage applies.
Planned Start Date	The DTG of the mission to which the disadvantage applies.

5.2.2.5 CCIR Decision Object

The ***Commander's Critical Information Requirements (CCIR) Decision Object*** (Figure 5-22) will contain the critical information that directly affects the successful execution of operations. The CCIR includes information that the commander requires which will directly affect his decisions and dictate the successful execution of an operation. The Commander specifies CCIRs for each operation.

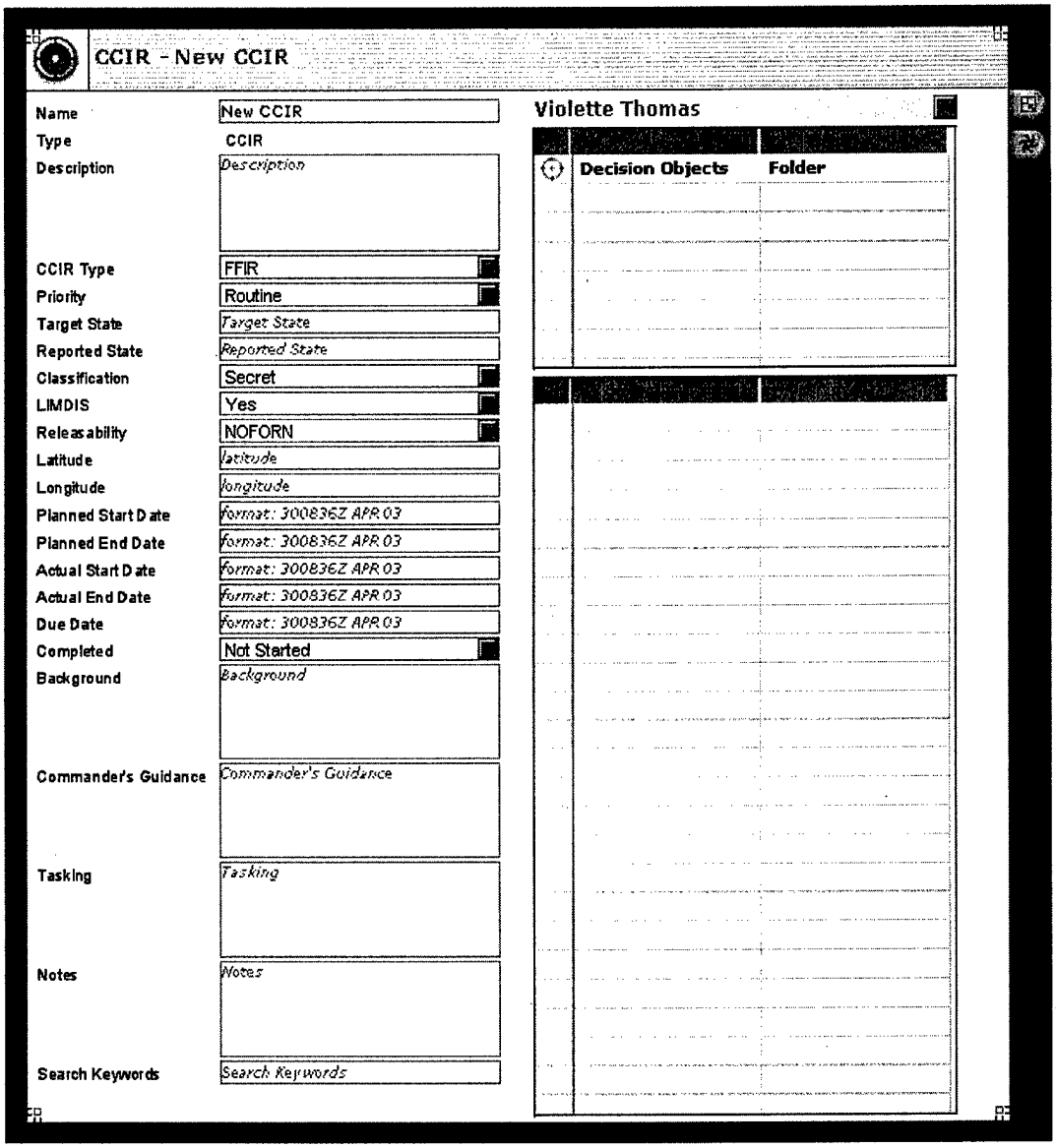

Figure 5-22. CCIR Decision Object Window

The fields within the ***CCIR Decision Object*** are described in Table 5-13.

Table 5-13. Components of the CCIR Decision Object Window

Field Name	Description
Name	A descriptive name pertaining to the CCIR Decision Object's contents. The user enters or changes the name of the CCIR Decision Object by highlighting the existing words in the field and typing the new name over the existing one.
Type	The type of Decision Object being displayed, e.g., CCIR. This field is automatically generated and cannot be changed.
Description	A description of the CCIR.
CCIR Type	Choose EEFI, FFIR, or PIR.
Priority	Choose Priority, Routine, or Urgent.
Target State	The desired value as identified by the CCIR. E.g., A commander wants to move to Phase II of an Operation when the Enemy Air defenses are degraded to 10%. The CCIR is the strength of Enemy Air Defenses, the Target State is 10%.
Reported State	The actual value of the CCIR at this moment. E.g., reported Enemy Air Defense strength = 35%.
Classification	Choose from Confidential, Secret, Top Secret, or Unclassified.
LIMDIS	Limited Distribution, Choose Yes or No.
Releasability	Indicates to whom the information is releasable. Choose from AUSNZUKCAN, NATO, NOFORN, RELJAPAN, RELROK, or Thailand.
Latitude	Latitude at which the mission to which the CCIR applies is taking place (e.g., 30.3905601501465).
Longitude	Longitude at which the mission to which the CCIR applies is taking place (e.g., -108.273017883301).
Planned Start Date	The DTG of the planned start of the mission to which the CCIR applies.
Planned End Date	The DTG of the planned end of the mission to which the CCIR applies.
Actual Start Date	The DTG of the actual start of the mission to which the CCIR applies.
Actual End Date	The DTG of the actual end of the mission to which the CCIR applies.
Due Date	The DTG of the date by which the mission to which the CCIR applies is due.
Completed	Denotes the status of the mission to which the CCIR applies. Choose from Completed, Not Started, or In Progress.
Background	A description detailing the background leading up to the mission to which the CCIR applies.
Commander's Guidance	A brief note pertaining to the Commander's Guidance for the mission to which the CCIR applies.

Field Name	Description
Tasking	The tasking that lead up to the mission to which the CCIR applies.
Notes	Additional notes relevant to the mission to which the CCIR applies.
Search Keywords	List keywords pertaining to the CCIR. Keywords will allow this CCIR to be found when a search is conducted for this kind of information.

5.2.2.6 COA Decision Object

The ***COA Decision Object*** (Figure 5-23) includes the course of action plans, which are developed by a commander's staff to provide a suggested approach to a given operation, phase or exercise.

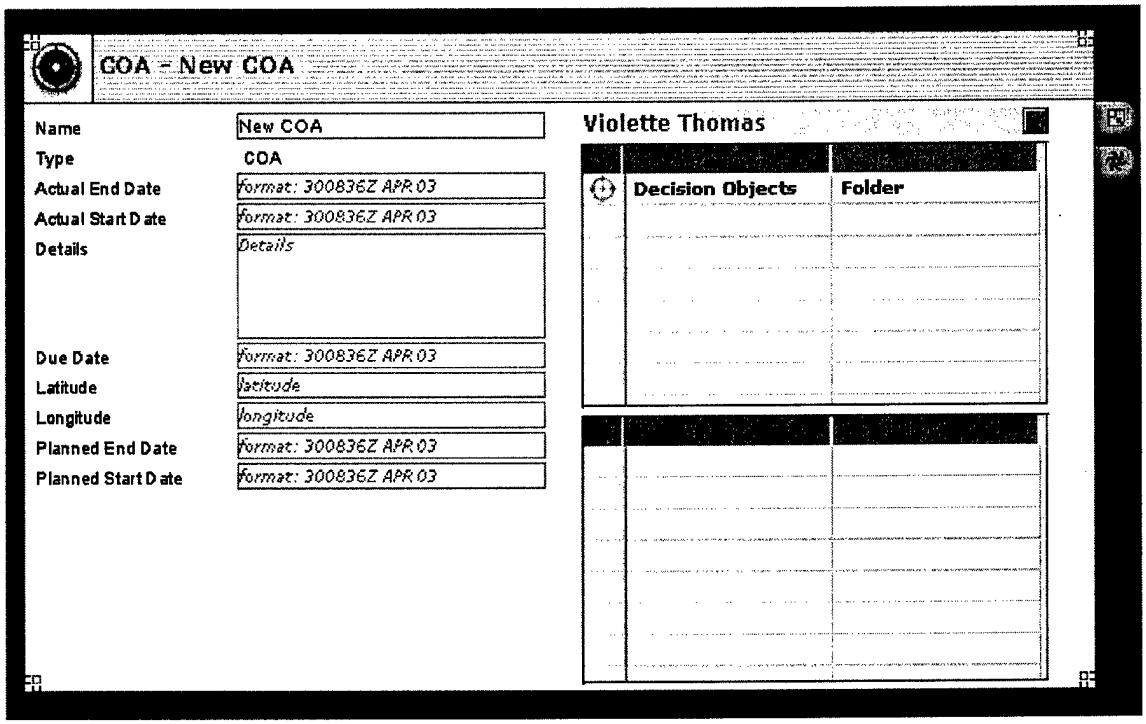

Figure 5-23. COA Decision Object Window

The fields within the ***COA Decision Object*** are described in Table 5-14.

Table 5-14. Components of the COA Decision Object Window

Field Name	Description
Name	A descriptive name pertaining to the COA Decision Object's contents. The user enters or changes the name of the COA Decision Object by highlighting the existing words in the field and typing the new name over the existing one.
Type	The type of Decision Object being displayed, e.g., COA. This field is automatically generated and cannot be changed.

Field Name	Description
Actual End Date	The DTG of the actual end of the mission to which the COA applies.
Actual Start Date	The DTG of the actual start of the mission to which the COA applies.
Details	Details related to the COA.
Due Date	The DTG of the date by which the mission to which the COA applies is due.
Latitude	Latitude at which the mission to which the COA applies is taking place (e.g., 30.3905601501465).
Longitude	Longitude at which the mission to which the COA applies is taking place (e.g., -108.273017883301).
Planned End Date	The DTG of the planned end of the mission to which the COA applies.
Planned Start Date	The DTG of the planned start of the mission to which the COA applies.

5.2.2.7 Analysis Decision Object

The ***Analysis Decision Object***, Figure 5-24, contains the thought process involved in the development of a COA.

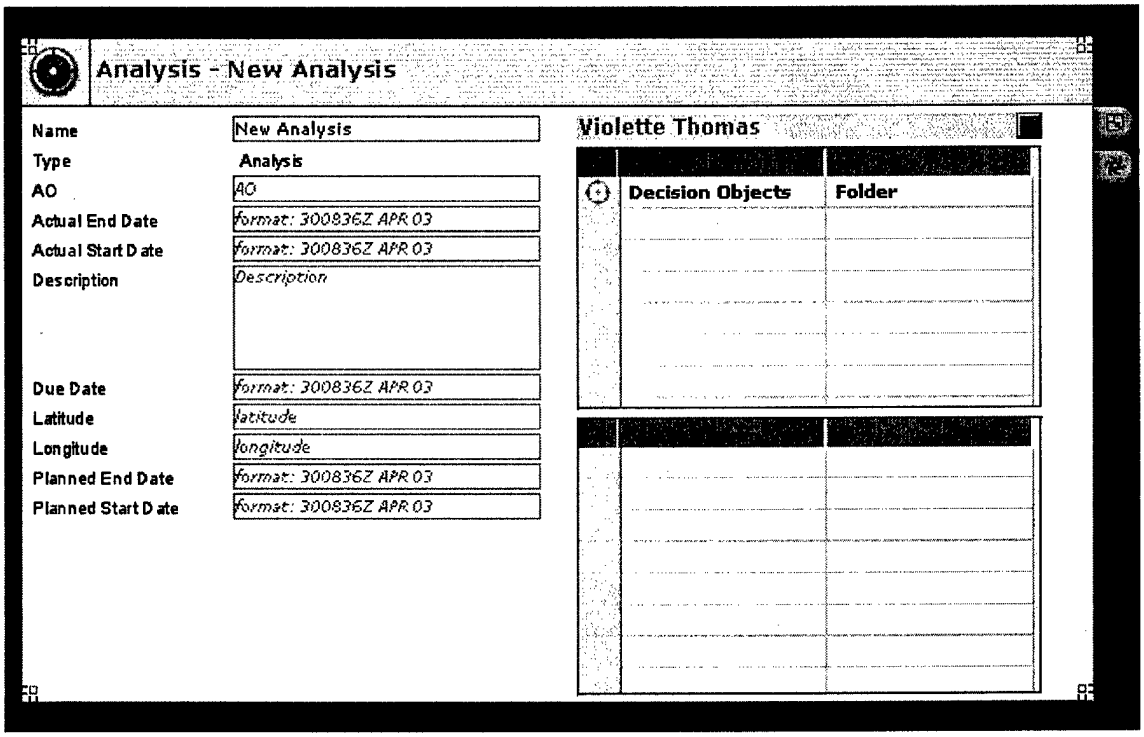

Figure 5-24. Analysis Decision Object Window

The fields within the ***Analysis Decision Object*** are described in Table 5-15.

Table 5-15. Components of the Analysis Decision Object Window

Field Name	Description
Name	A descriptive name pertaining to the Analysis Decision Object's contents. The user enters or changes the name of the Analysis Decision Object by highlighting the existing words in the field and typing the new name over the existing one.
Type	The type of Decision Object being displayed, e.g., Analysis. This field is automatically generated and cannot be changed.
AO	Action Officer responsible for the analysis.
Actual End Date	The DTG of the actual end of the mission to which the analysis applies.
Actual Start Date	The DTG of the actual start of the mission to which the analysis applies.
Description	A description of the analysis.
Due Date	The DTG of the date by which the mission to which the analysis applies is due.
Latitude	Latitude at which the mission to which the analysis applies is taking place (e.g., 30.3905601501465).
Longitude	Longitude at which the mission to which the analysis applies is taking place (e.g., -108.273017883301).
Planned End Date	The DTG of the planned end of the mission to which the analysis applies.
Planned Start Date	The DTG of the planned start of the mission to which the analysis applies.

5.2.3 Reference Objects

Reference Objects, Figure 5-25, are objects that allow the user to provide references to other resources. The only ***Reference Object*** available to the DFC2 user is the ***URL Reference Object***.

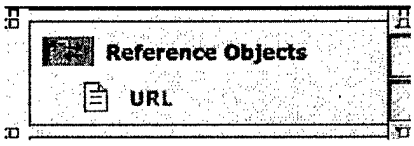

Figure 5-25. Reference Objects

5.2.3.1 URL Reference Object

The ***URL Reference Object***, Figure 5-26, provides a means whereby the user can specify a ***Uniform Resource Locator*** at which additional references or sources of information can be accessed.

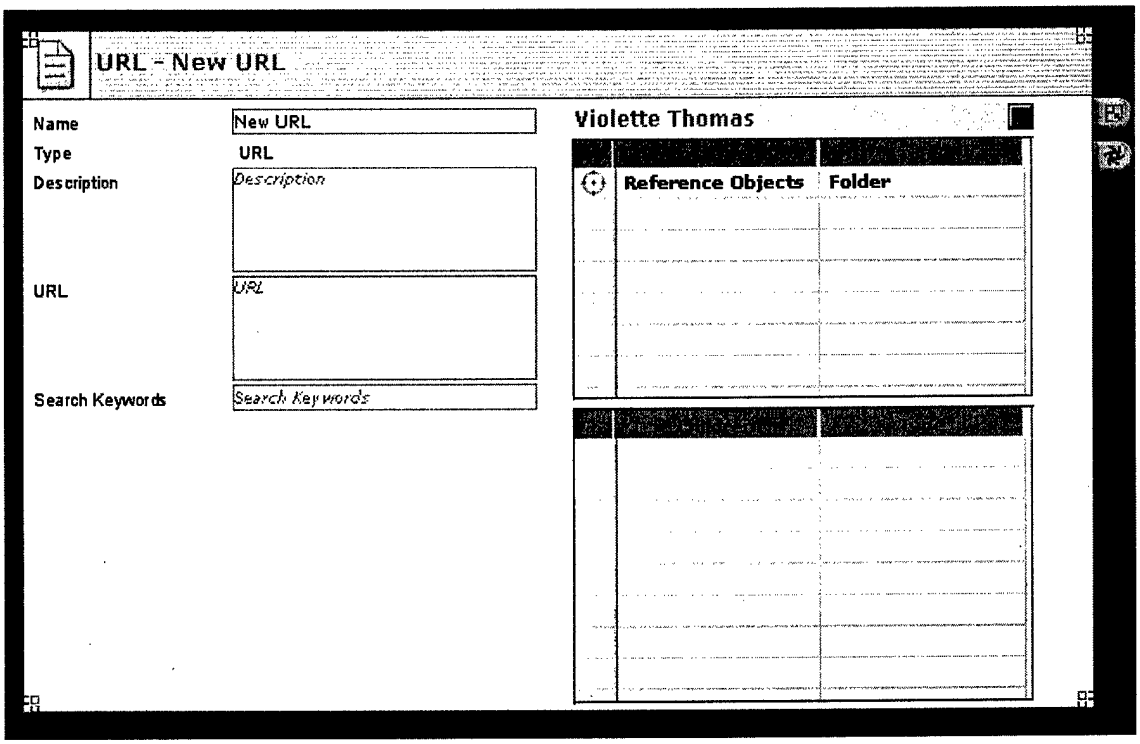

Figure 5-26. URL Reference Object Window

The fields within the ***URL Reference Object*** are described in Table 5-16.

Table 5-16. Components of the URL Reference Object Window

Field Name	Description
Name	A descriptive name pertaining to the URL Reference Object's contents. The user enters or changes the name of the URL Reference Object by highlighting the existing words in the field and typing the new name over the existing one.
Type	The type of Reference Object being displayed, e.g., URL. This field is automatically generated and cannot be changed.
Description	A description of the URL Reference Object.
URL	The Uniform Resource Locator of the URL Reference Object.
Search Keywords	List keywords pertaining to the URL. Keywords will allow this URL Reference Object to be found when a search is conducted for this type of information.

5.2.4 Status Objects

Status Objects provide a means of displaying the status of ***Context Objects***, such as Operations, Phases, Events, etc. Each ***Status Object*** has an associated **value** field, which will display a representative status symbol or percentage value when the ***Context Object***

associated with the particular ***Status Object*** is displayed in a ***Status View***. This is described in more detail in Section 5.3.1.3.

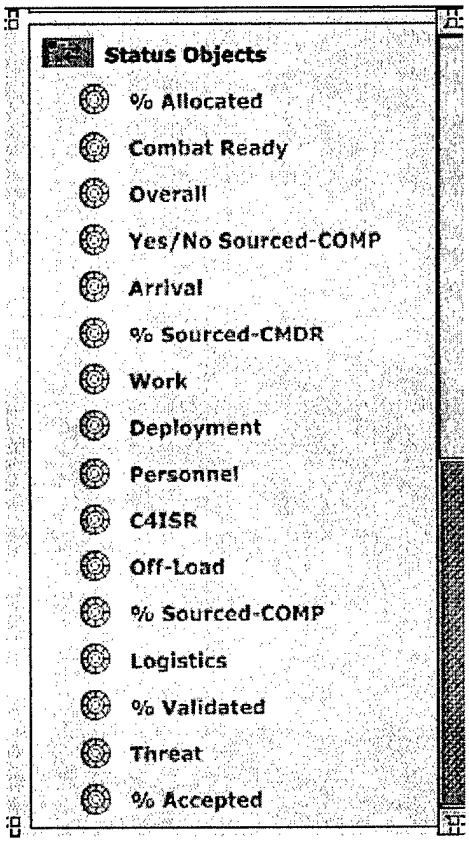

Figure 5-27. Status Objects

Status Objects, when dragged and dropped into the *Workspace or Hierarchy View*, will become associated with the ***Context Object*** (e.g., Operation, Event, etc.) under which they are placed in the hierarchy, as illustrated in Figure 5-28.

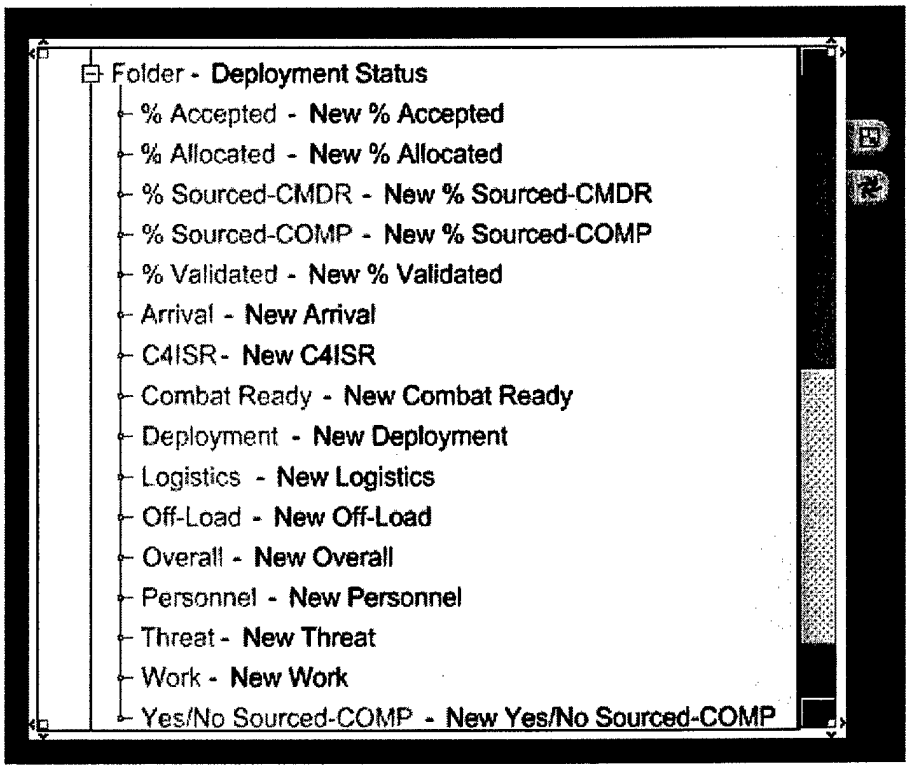

Figure 5-28. Hierarchy View Illustrating a Context Object (Deployment Status Folder) with Associated Status Objects Nested Within

When the ***Status Object*** is dragged from the *Workspace* or *Hierarchy View* onto the desktop, the user will see that the parent of the object is the ***Context Object*** (e.g., Deployment Status Folder) under which it is nested in the *workspace* hierarchy. When the ***Status Object*** is dragged into the desktop, the user will then have the ability to populate the ***Status Object*** and choose a value (e.g., a status symbol or a percentage value) from the associated **Value** drop-down menu, as illustrated in Figure 5-29.

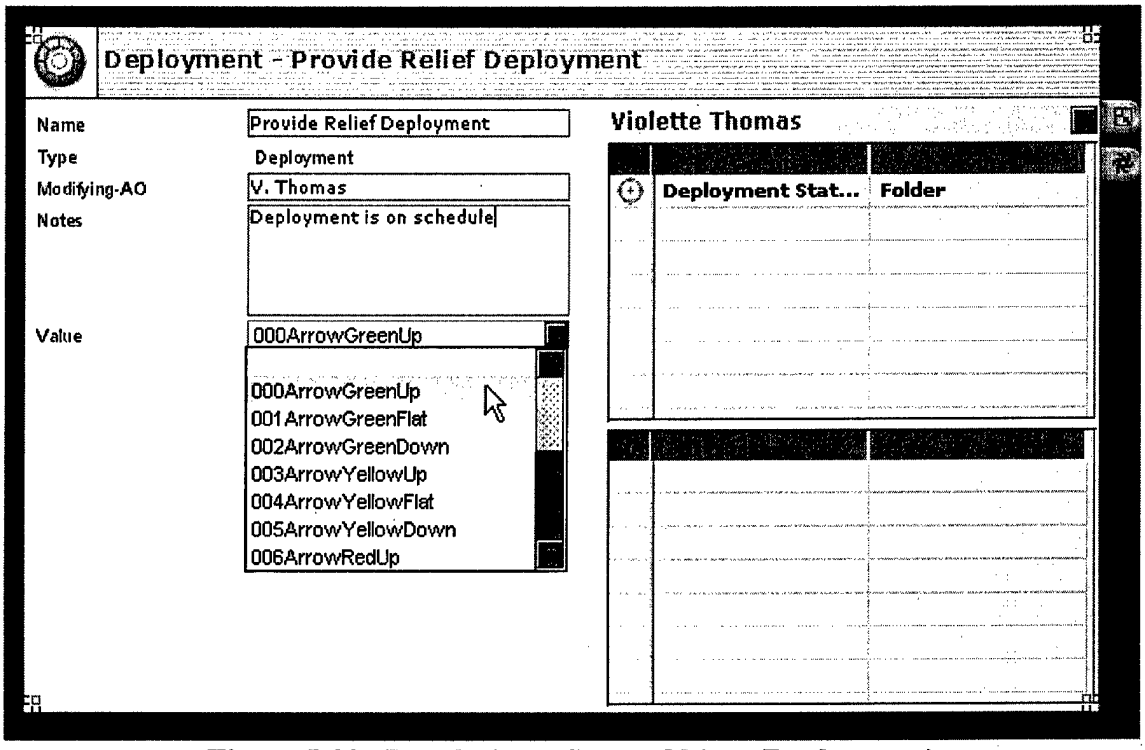

Figure 5-29. Populating a Status Object (Deployment)

The hierarchy relationship described and illustrated above is important because when the user drags and drops the ***Context Object*** (e.g., Deployment Status Folder) into the ***Status View***, the associated ***Status Object*** values will be displayed in their respective columns in the view.

Note that the Deployment value of ArrowGreenUp that was selected for the ***Provide Relief Deployment Status Object***, depicted in Figure 5-29, displays as a green arrow pointing upward in the **Deployment** column when the ***Deployment Status Folder Context Object*** is dragged into the *Status View*, as illustrated in Figure 5-30 below.

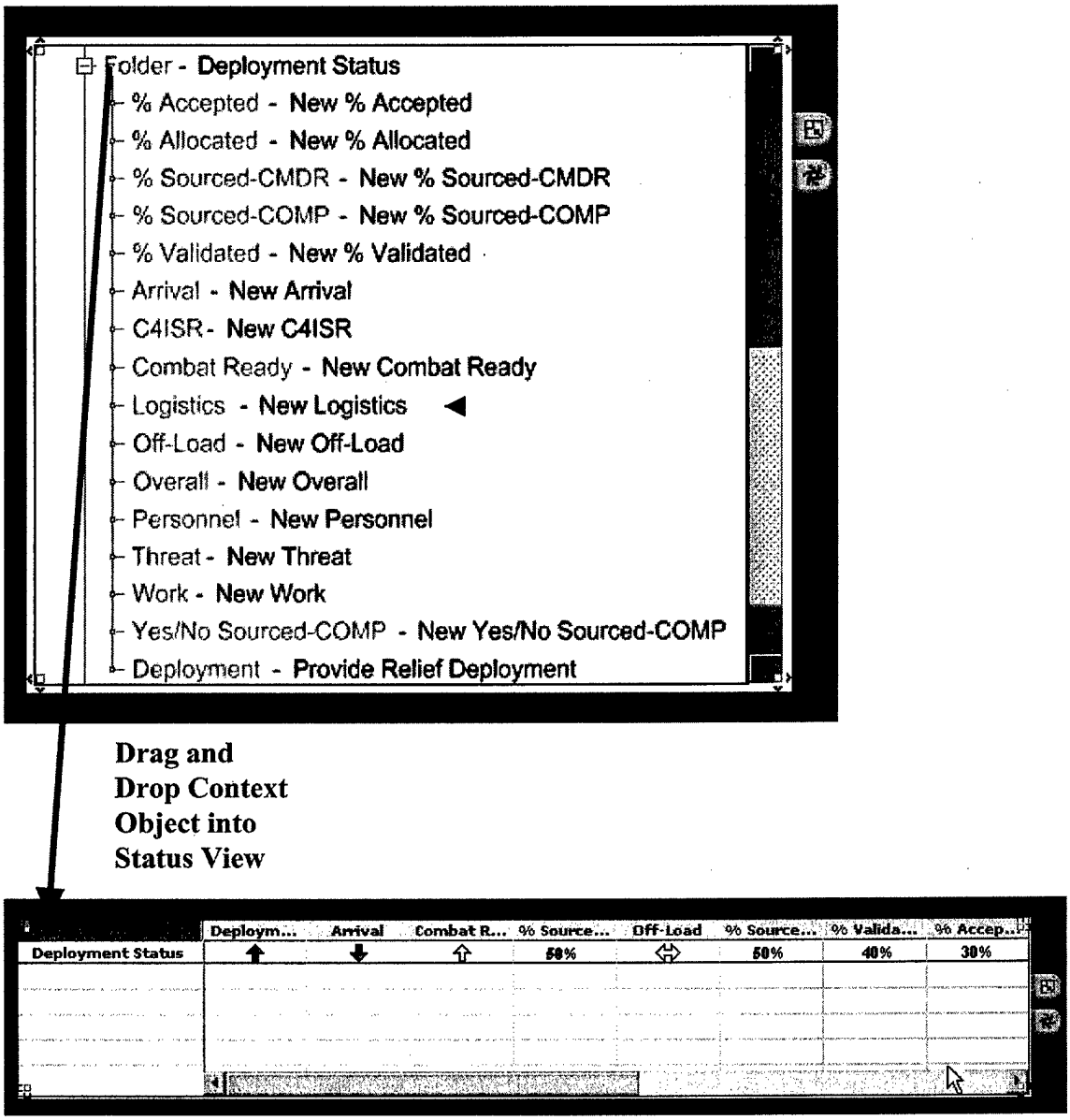

Figure 5-30. Dragging and Dropping a Context Object with Associated Status Objects into a Status View

There are 16 different ***Status Objects*** that the DFC2 user can employ to show the status of a given situation. All of the ***Status Objects*** are similarly constructed. Each consists of 5 fields as described in Table 5-17. The only field that will contain different values is the **Value** field, which may display either a percentage value or a status value, depending upon which ***Status Object*** is selected.

Table 5-17. Components of a Status Object Window

Field Name	Description
Name	A descriptive name pertaining to the Status Object's contents. The user enters or changes the name of the Status Object by highlighting the existing words in the field and typing the new name over the existing one.
Type	The type of Status Object being displayed, e.g., Deployment. This field is automatically generated and cannot be changed.
Modifying-AO	The Modifying Action Officer.
Notes	Notes related to the Status Object.
Value	Choose the percentage value (0-100%).

The ***Work Status Object*** is the single exception to the above descriptions. It replaces the **Modifying-AO** field with the **Late** field, which denotes the status of the work (Choose At Risk, Late, or OK). The ***Work Status Object*** also replaces the **Value** field with the **Risk Margin** field, which denotes the risk margin for the work in hours, minutes, and seconds.

5.3 Dispensers

The *Dispenser Frame* lets the user select different views, organizers, and tools from a scrollable frame. It appears by default when the user logs in to the desktop. Dispensers can be expanded or collapsed by double-clicking on the icon to the left of the dispenser name.

5.3.1 Views

The *Views* section of the *Dispenser Frame* allows the user to drag and drop a desired view to the desktop. Views allow the user to display previously created objects in an appropriate context.


Note: As objects are placed into views, the frame of the view must change to blue before the view is ready to accept the object.

Dragging and dropping can move objects from view to view. **Objects may be copied from one view to another by pressing the *Ctrl* key while dragging the object.**

There are eleven different views from which the user can choose, as illustrated in Figure 5-31 below.

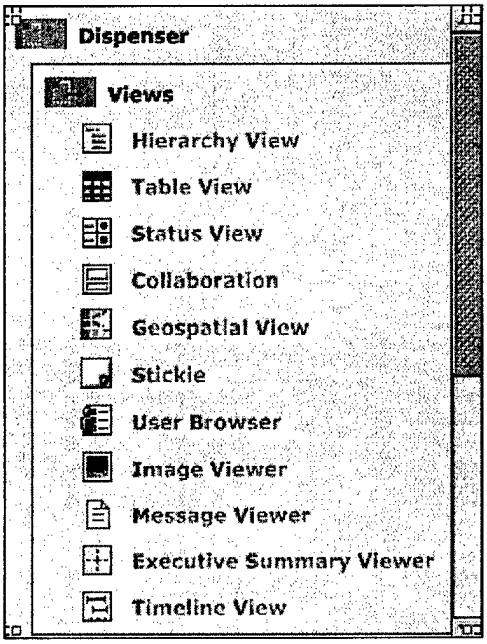

Figure 5-31. Dispenser Frame Views

It is important to realize that in order for the information the user drags onto the desktop to be saved (or persisted) to the database, it must be associated with an ***Executive Summary*** object (described in Section 5.2.2.3) and placed into the *Executive Summary Viewer* frame (described in Section 5.3.1.1). Thus, each view discussed in this section will be shown within the context of the *Executive Summary Viewer* to which the associated ***Executive Summary*** object has been added.

Note that there are two shortcut tabs located on each view frame: ***Iconify*** and ***Dismiss Target***. Clicking on the ***Iconify*** tab reduces the view size to an icon. To return the view to its original size, just double-click on the icon. Clicking on the ***Dismiss Target*** tab dismisses the view from the desktop, its location within other frames, or from the *Executive Summary Viewer*. It serves the same purpose as dragging and dropping the view over the ***Trash*** symbol.

5.3.1.1 Executive Summary Viewer

Although the *Executive Summary Viewer,* Figure 5-32, is not the first view option listed in the *Dispenser Frame*'s *Views* section, it is considered the "glue" that holds the DFC2 executive summary information together. This view, in conjunction with the ***Executive Summary*** object (described in Section 5.2.2.3), will contain all of the supporting information that will be presented to the decision-maker. Tables, views, organizers, objects, etc can be entered into the *Executive Summary Viewer* by drag-and-drop.

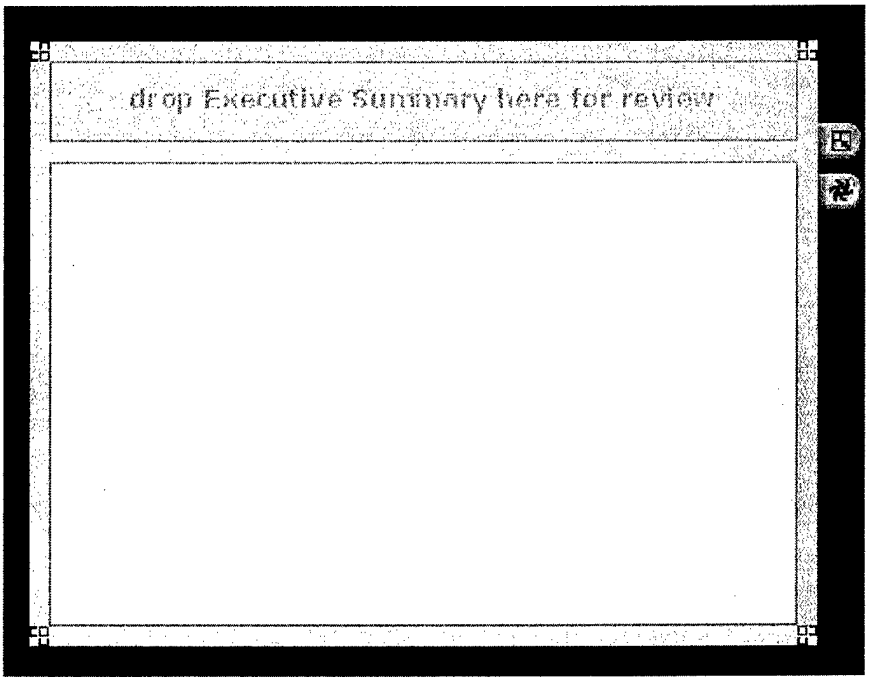

Figure 5-32. Executive Summary Viewer

To begin the construction of an executive summary, the user must first drag and drop the *Executive Summary Viewer* onto the DFC2 desktop. Then the user must drag the ***Executive Summary Decision Object*** from the *Workspace,* in which it had previously been dropped, and drop it in the top area of the frame. The ***Executive Summary*** object should be dropped in the space that reads "drop Executive Summary here for review."

It is important to remember that nothing can be dropped into the *Executive Summary Viewer* until the ***Executive Summary Decision Object*** has been dragged and dropped there. Also, the user should remember that the ***Executive Summary Decision Object*** must first be dragged and dropped into a *Workspace* (whether Private or Public) or a *Hierarchy View* prior to being dragged and dropped into the *Executive Summary Viewer.*

Dragging an ***Executive Summary Decision Object*** and dropping it into the *Executive Summary Viewer* is illustrated in Figure 5-33 below.

It is important to note that the ***Executive Summary Decision Object*** must be dropped on the title area of the *Executive Summary Viewer* and the blue border outline must be displayed when the object is dropped here.

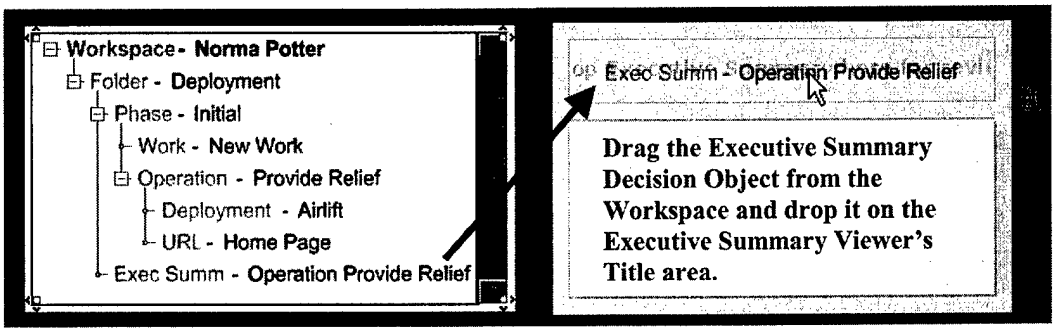

Figure 5-33. Dragging the Executive Summary Decision Object and Dropping it into the Executive Summary Viewer

Now the user can begin adding views and objects to the Executive Summary viewer using drag and drop operations. A typical populated *Executive Summary Viewer* might look similar to Figure 5-34 below.

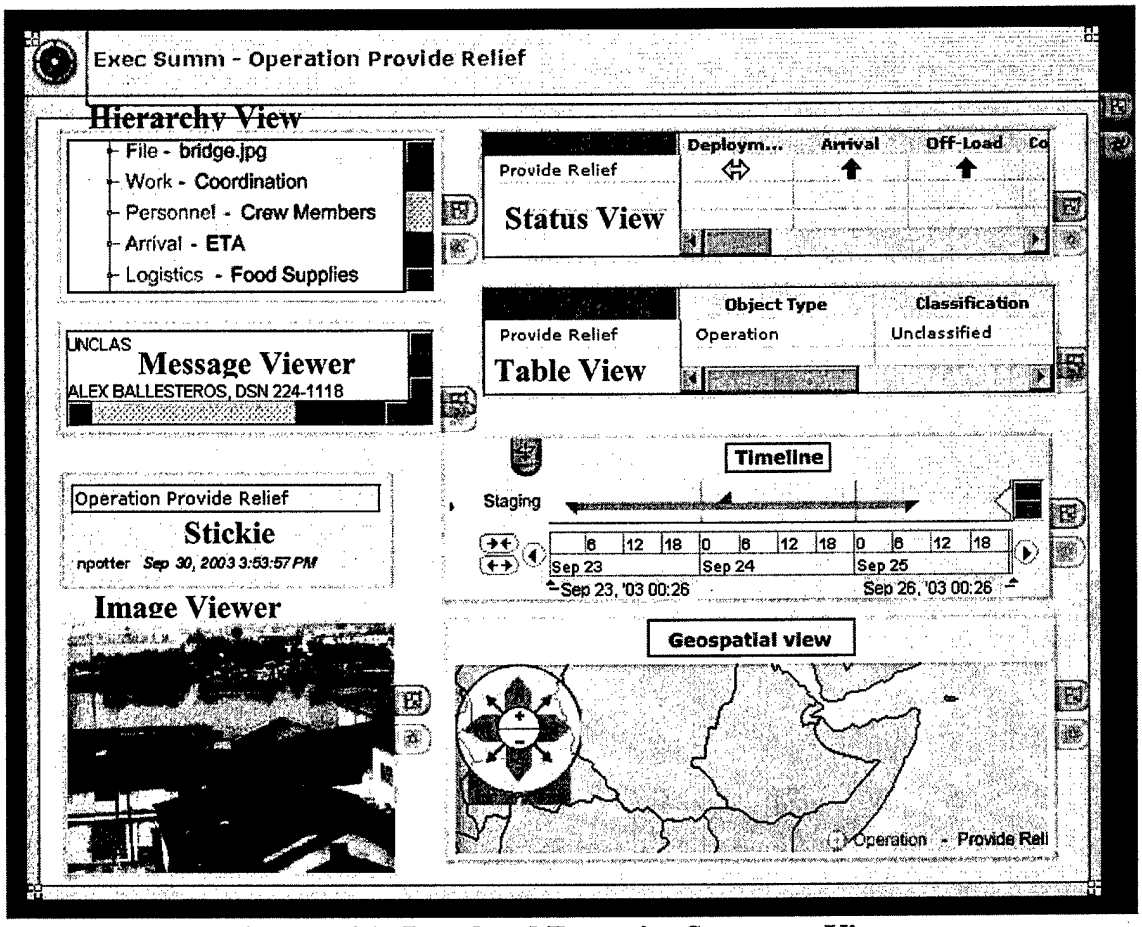

Figure 5-34. Populated Executive Summary Viewer

5.3.1.2 Hierarchy View

As its name implies, the *Hierarchy View*, depicted in Figure 5-35, provides a view for displaying the hierarchy of all or a subset of workspace objects. The *Hierarchy View* can be used to display any object and show its relationship with other objects within the workspace.

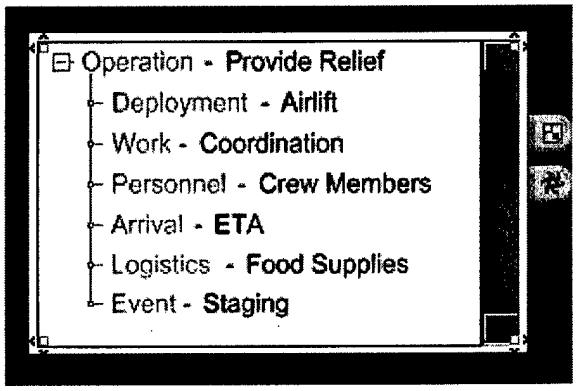

Figure 5-35. Hierarchy View

The *Hierarchy View* can be placed on the *Executive Summary Viewer* (described in section 5.3.1.1) to show the relationship of the different objects from which the summary is being constructed. The *Hierarchy View* is also an excellent point from which the user can launch a ***URL*** object (described in Section 5.2.3.1).

When placed into the *Executive Summary Viewer*, to which an ***Executive Summary*** object (described in Section 5.2.2.3) has been added, the *Hierarchy View* will look similar to Figure 5-36.

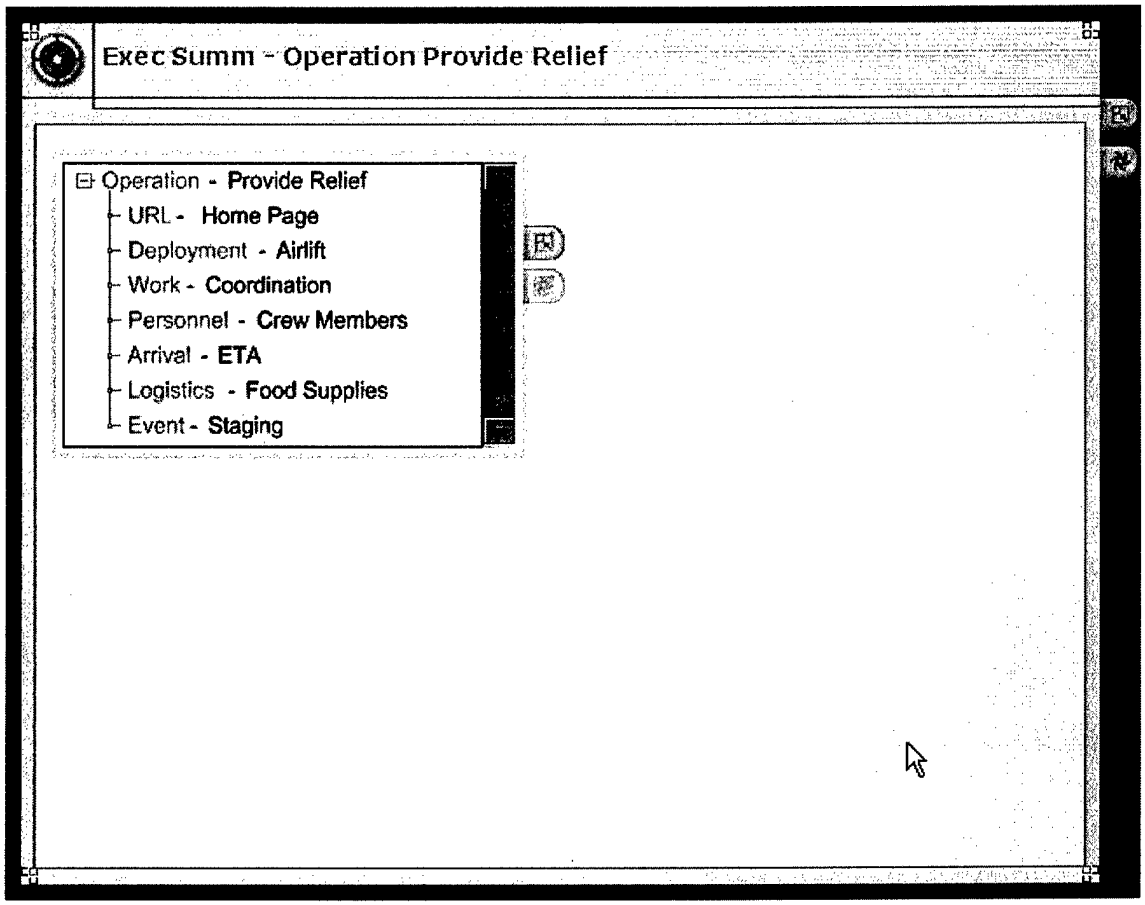

Figure 5-36. Hierarchy View Dragged into Executive Summary Viewer and Populated

5.3.1.3 Table View

The *Table View*, depicted in Figure 5-37, allows the user to display objects and their attributes in a table. Dragging and dropping allows the user to enter objects into the body of the table. Default table settings include the following columns: Object Type, Classification, Commander's Guidance, and Tasking.

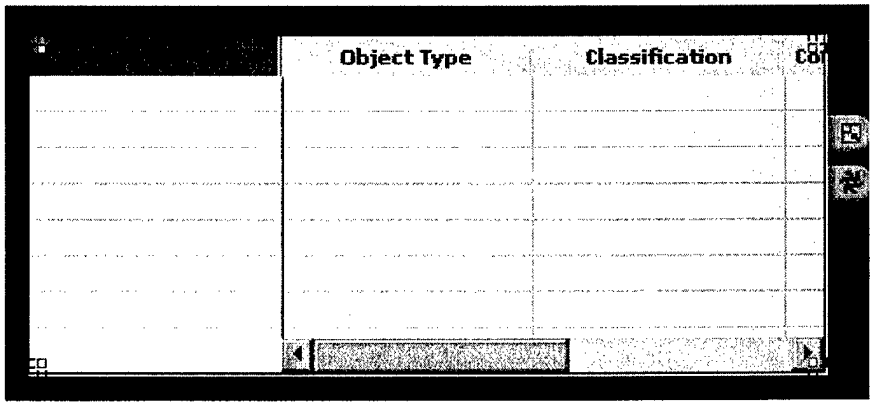

Figure 5-37. Table View

When a *Table View* is placed inside the *Executive Summary Viewer* and an object is dragged and dropped into the *Table View*, it will look similar to Figure 5-38.

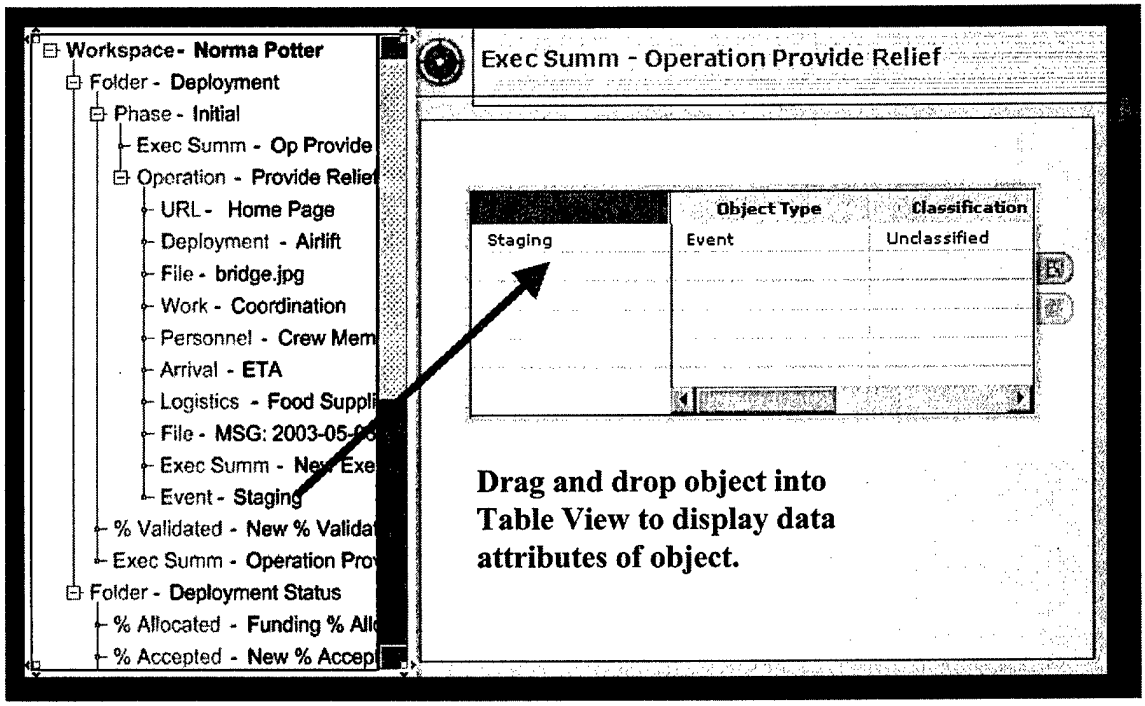

Figure 5-38. Table View Dragged and Dropped into Executive Summary Viewer and Populated

The user can drag any type of object into the *Table View* and different kinds of objects may be combined in the same *Table View*.

When an object is dragged into a *Table View*, columns are automatically generated for each data attribute of the object being placed in the *Table View*. As new objects with different data attributes are dragged and dropped into the *Table View*, new columns are simply added to the right side of the table. The user will note that not all columns are populated within each row of data because every row may not contain the same data attributes.

The first column in a *Table View* is always the object's identifier or name and has no column header. The user can change which attribute is displayed for any other column by right clicking in the column header and choosing an attribute from the drop-down menu. For example, Figure 5-39 shows the different available attributes for the object dropped into the Table View in Figure 5-38 above.

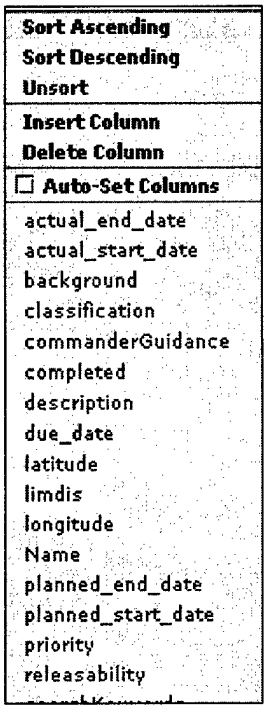

Figure 5-39. Right-Click Menu for Table Columns

Note that the column drop-down menu is divided into two parts. The top of the menu contains the different options that can be performed on the data within the *Table View* and the bottom half contains the attributes that can be added as columns to the table. This listing of attributes will change depending upon the object, e.g., event, operation, etc. that is dropped into the *Table View*.

The menu sort options will sort the *Table View* data in descending or ascending order according to the data in the selected column. It should be noted that data items beginning with a number will appear first in the sorted data when the ***Sort Ascending*** option is selected and last when the ***Sort Descending*** option is selected. The ***Unsort*** option will return the data to its previous sort order.

The user can insert columns into the *Table View* by right clicking positioning the cursor over a column, right-clicking, and selecting ***Insert Column*** from the drop-down menu. The new column will be inserted to the left of the cursor position. Select the information to be displayed in the column by right-clicking in the new column's header and selecting an attribute from the listing at the bottom of the menu. The inserted column will be automatically populated with data if an object (e.g., event, operation, etc.) contains any data for that particular attribute in the *Table View*. For example, if an object containing classified information were placed in the *Table View*, the data classification would be displayed in the ***Classification*** column. The user would most likely want to insert a column into the table that pertains to ***Releasability*** as well. Thus, the user can insert a column and then select the ***Releasability*** attribute from the attributes listing to be placed in the inserted column.

The user may also delete any columns from the *Table View* by right clicking on the column header and selecting ***Delete Column*** from the drop-down menu.

If the ***Auto-Set Columns*** box is checked, the *Table View* will contain columns for all of the items listed at the bottom of the drop-down menu (e.g., actual_end_date, latitude, etc.) Otherwise, the default *Table View* columns will be displayed.

Right clicking on any of the populated rows (from the first column) in the *Table View* will activate a drop-down menu that allows the user to mark (highlight) objects. When a color is chosen from the ***Mark*** submenu, the selected row in the *Table View* will be highlighted in the selected color. Note, also, that the selected object is not only highlighted in the same color in the *Table View*, but also in the *Workspace* and *Hierarchy Views*, as well as any other views in which the object has been placed. This feature benefits the user because it allows the user to call attention to a particular object across multiple display views. Right click again and select the ***Unmark*** option to remove the highlighting.

Right clicking on a row in a *Table View* (from the first column) and selecting the ***Delete*** option allows the user to remove objects from the *Table View*. Keep in mind that deleting an object from a view does not delete it from the workspace hierarchy.

Figure 5-40 below illustrates the highlighting or marking feature, and displays the available menu options from the ***Table View*** row right-click menu.

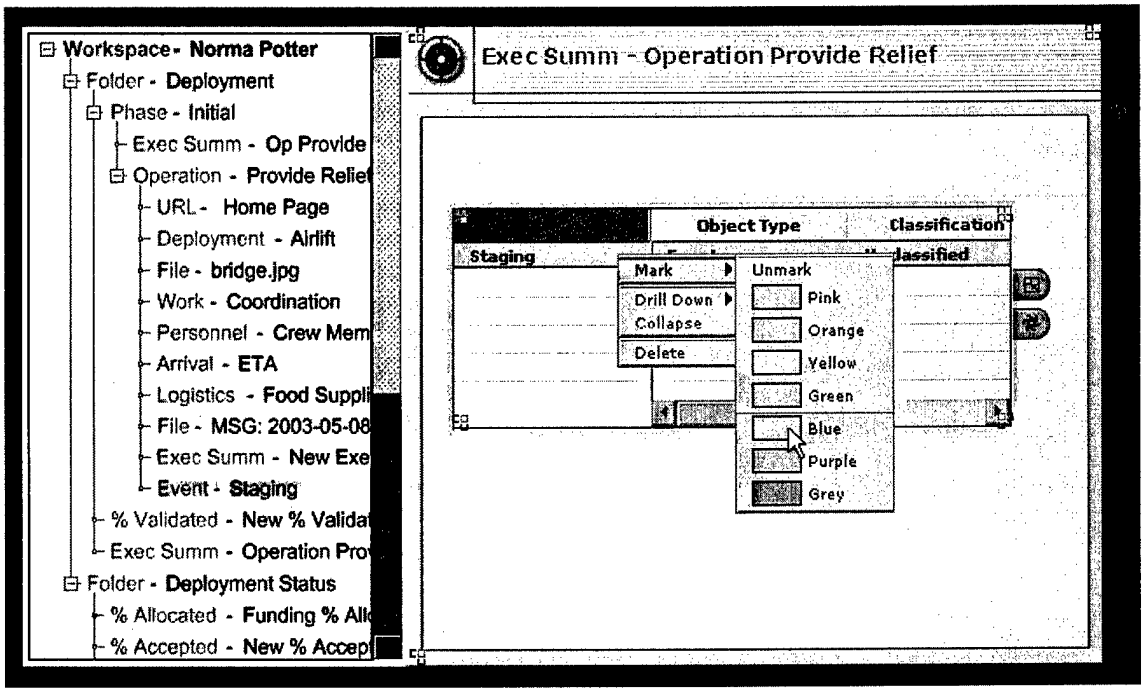

Figure 5-40. Right-Click Menu for Table View Rows

5.3.1.4 Status View

Similar in appearance to the *Table View*, the *Status View*, Figure 5-41, is used to display context objects and their associated status object values. Enter objects by dragging and dropping them into the body of the *Status View*. The information in the columns and rows will be populated with the associated status object data. The *Status View* is pre-configured to display columns that correspond to the ***Status Objects*** found within the *New Object Palette Dispenser*.

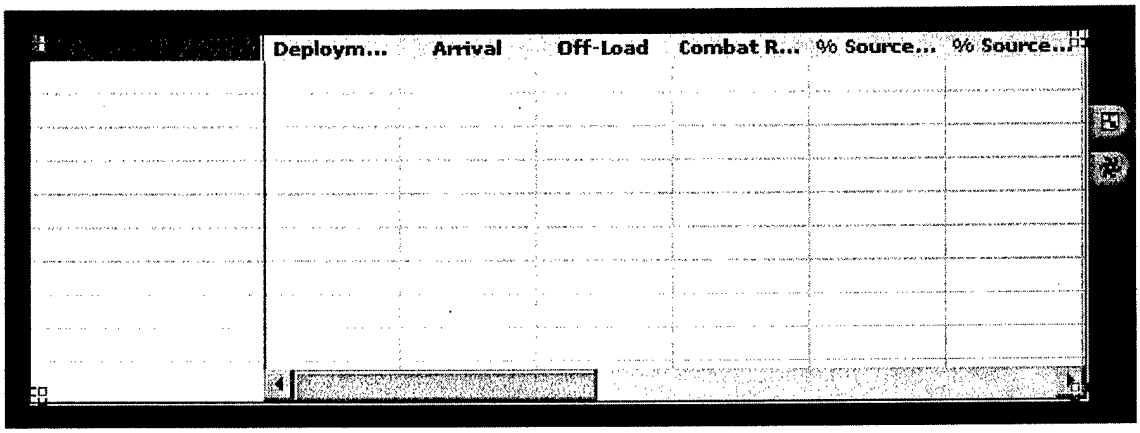

Figure 5-41. Status View

The *Status View* can be placed in the *Executive Summary Viewer* to show the status of the objects comprising the summary being constructed.

When a particular ***Context Object*** (such as an event, operation, etc.) having associated ***Status Objects*** (such as Deployment, Arrival, etc.) is dragged into the *Status View*, the columns will be populated with status symbols corresponding to the values previously selected for the individual ***Status Objects***. This is illustrated in Figure 5-42.

For example, if the value "000ArrowGreenUp" has been selected for the "*Deployment*" ***Status Object***, then a green arrow pointing in an upward direction will appear in the *Deployment* column in the *Status View* when the associated ***Context Object*** is dragged into the *Status View*. The example depicted in Figure 5-42 below shows that the ***Context Object*** "Provide Relief" and its associated ***Status Objects***, has been dropped into the *Status View*. Further, it shows that a value of "ArrowGreenUp" had been selected for the "Deployment" ***Status Object***, which is associated with the "Provide Relief" ***Context Object***, as shown in the *Hierarchy View* in the same figure. Thus the corresponding symbol in the "Deployment" column is an upward-pointing green arrow. This provides a bird's eye view of the ***Context Object's*** status. The status of multiple ***Context Objects*** and their associated ***Status Objects*** may be portrayed in a single *Status View*.

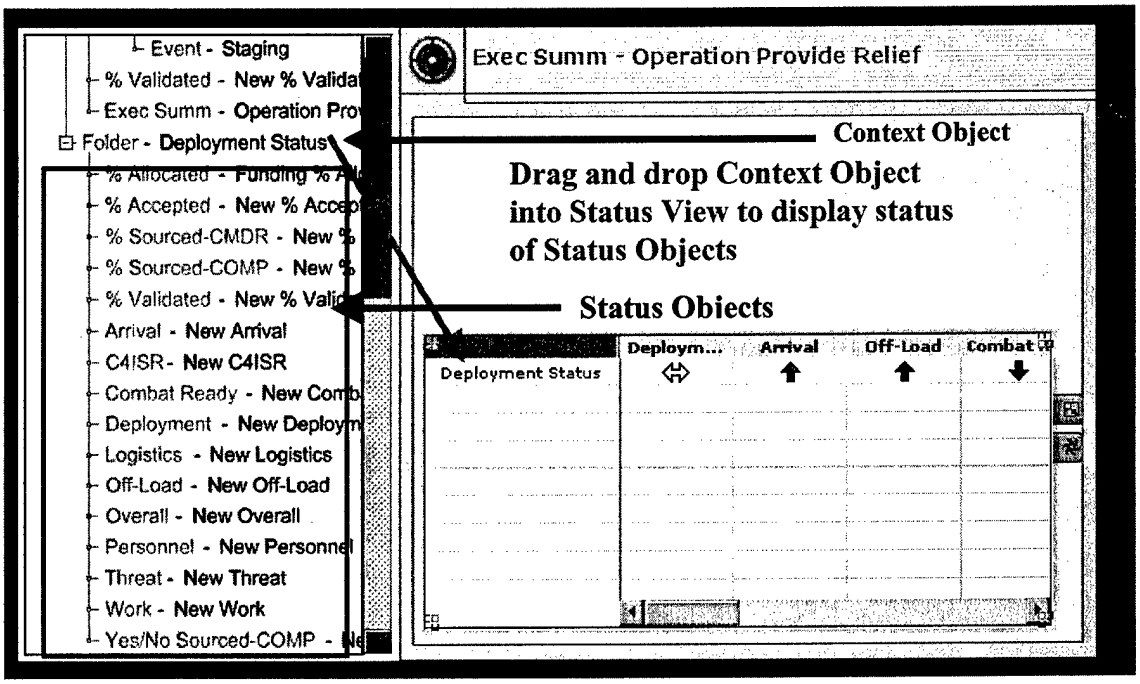

Figure 5-42. Status View Dragged and Dropped into Executive Summary Viewer and Populated

Right clicking on any of the populated rows (from the first column) in the *Status View* will activate a drop-down menu that allows the user to mark (highlight) objects. When a color is chosen from the ***Mark*** submenu, the selected row in the *Status View* will be highlighted in the selected color. Note, also, that the selected object is not only highlighted in the same color in the *Status View*, but also in the *Workspace* and *Hierarchy Views*, as well as any other views in which the object has been placed. This feature benefits the user because it allows the user to identify a specific object across multiple display views. Right click again and select the ***Unmark*** option to remove the highlighting.

Right clicking on a row in a *Status View* (from the first column) and selecting the ***Delete*** option allows the user to remove objects from the *Status View*. Keep in mind that deleting an object from a view does not delete it from the workspace hierarchy.

The marking (highlighting) function is illustrated in Figure 5-43 for the *Status View*.

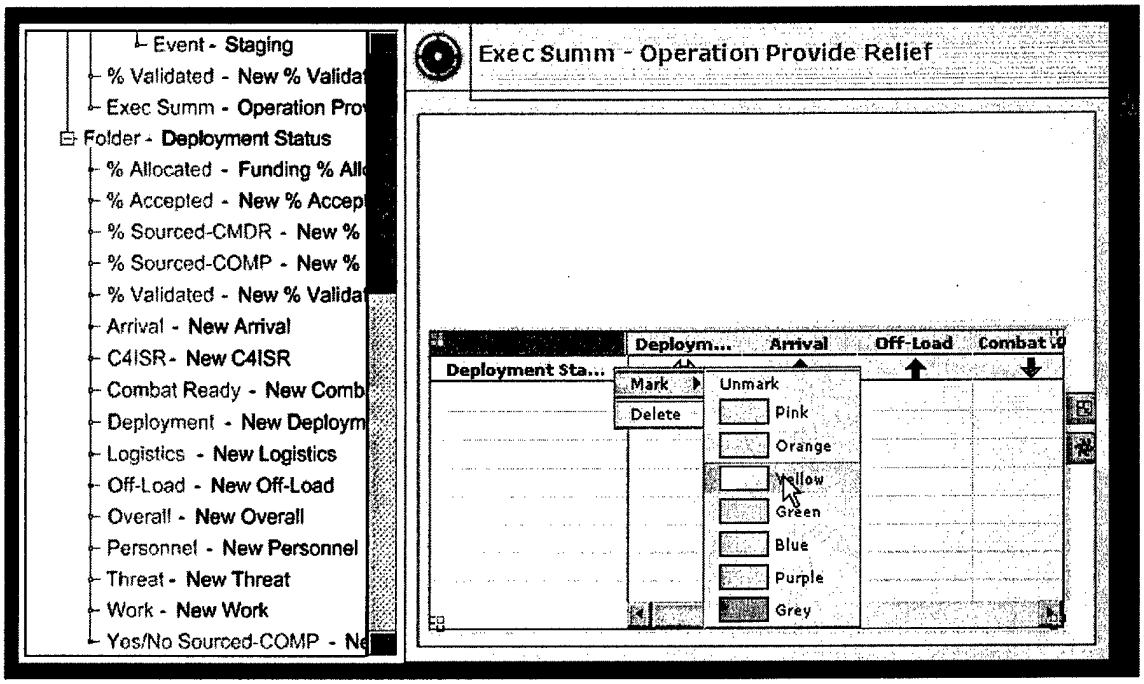

Figure 5-43. Right-Click Drop-Down Menu for Status View Showing Marking

5.3.1.5 Collaboration View

The *Collaboration View* (Figure 5-44), as its name implies, provides the user with a means of working interactively with other users on a common issue. The *Collaboration View* allows users to chat with one another about a specific operation, event, etc. while they view the same information on their respective displays.

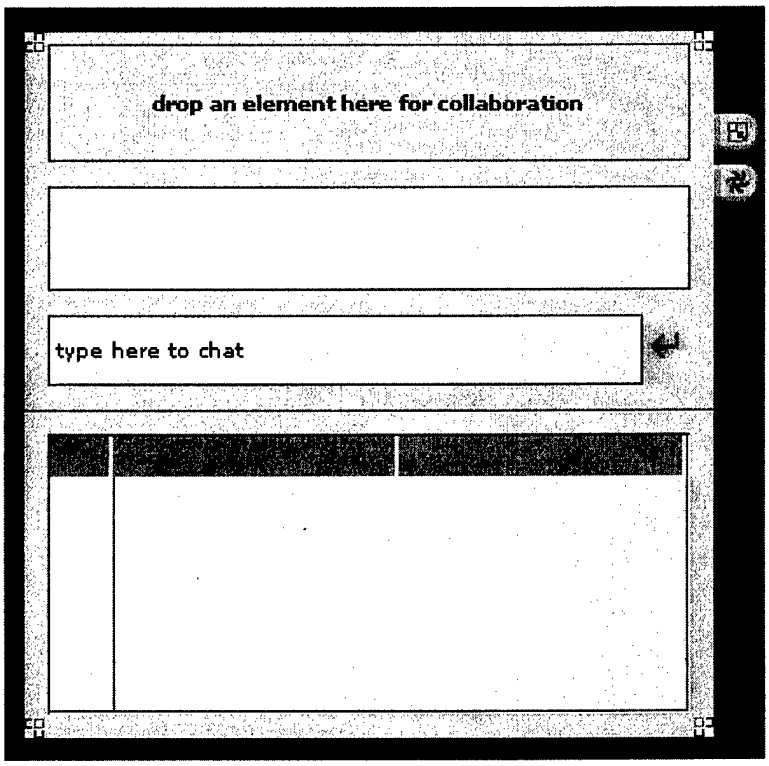

Figure 5-44. Collaboration View

A more detailed description of the operational use of the Collaboration tool is provided in the DFC2 Training Manual.

Users will drag and drop an object into the *Collaboration View* and then begin conversing with one another using the chat messaging area of the *Collaboration View*. Figure 5-45 depicts a collaboration session relating to the "Provide Relief" operation.

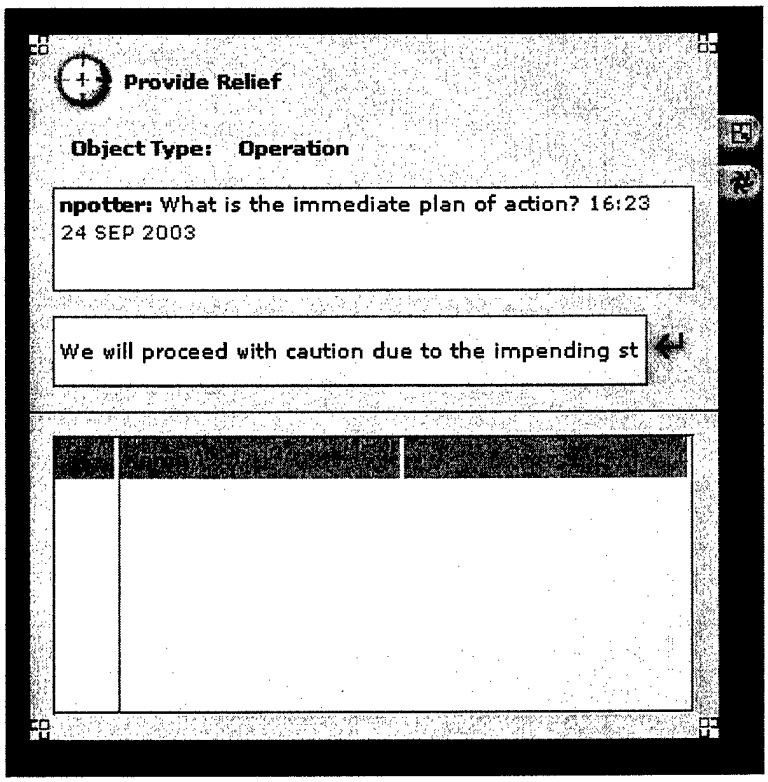

Figure 5-45. Collaboration Session

5.3.1.6 Geospatial View

The *Geospatial View* (Figure 5-46) provides a map of the world that may be navigated by the user to show the specific area in which an event is taking place.

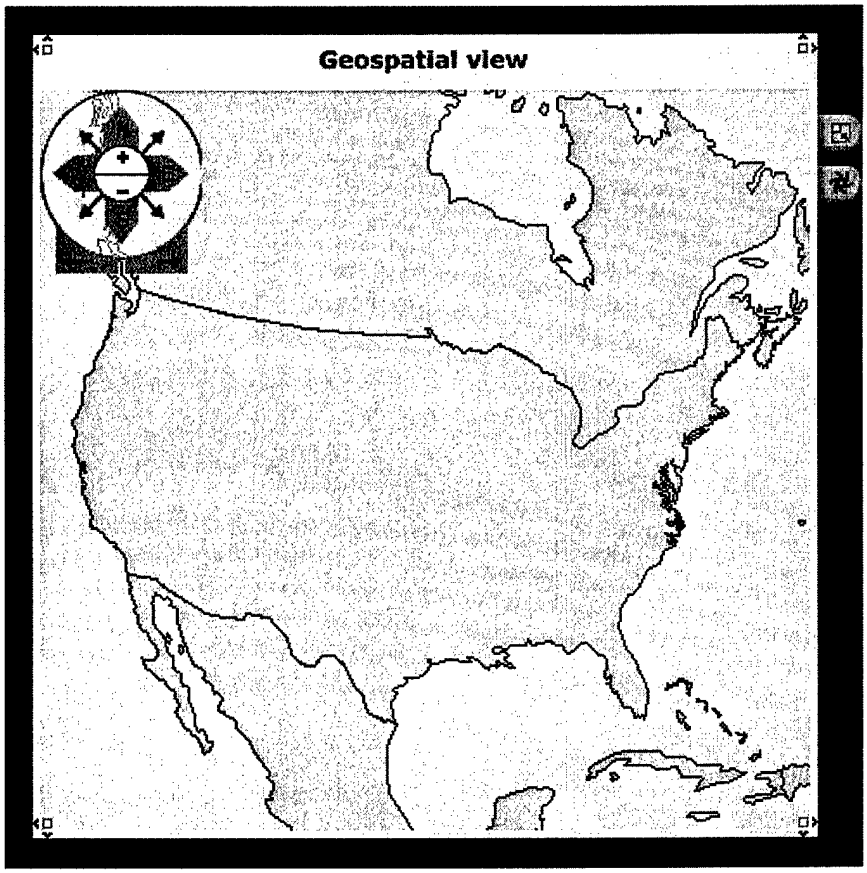

Figure 5-46. Geospatial View

The *Geospatial View* map includes a navigation compass, which enables the user to zoom in and out, move directionally and to alternate between two geographic locations.

Previously created ***Context Objects*** having **Latitude** and **Longitude** attributes defined can be dragged and dropped onto the *Geospatial View.* They will then snap into the appropriate location on the map. Conversely, if the object is dragged and dropped in a specific location on the map, the **Latitude** and **Longitude** attributes will be calculated based upon the location in which the Object was dropped. This functionality is illustrated in Figure 5-47 below.

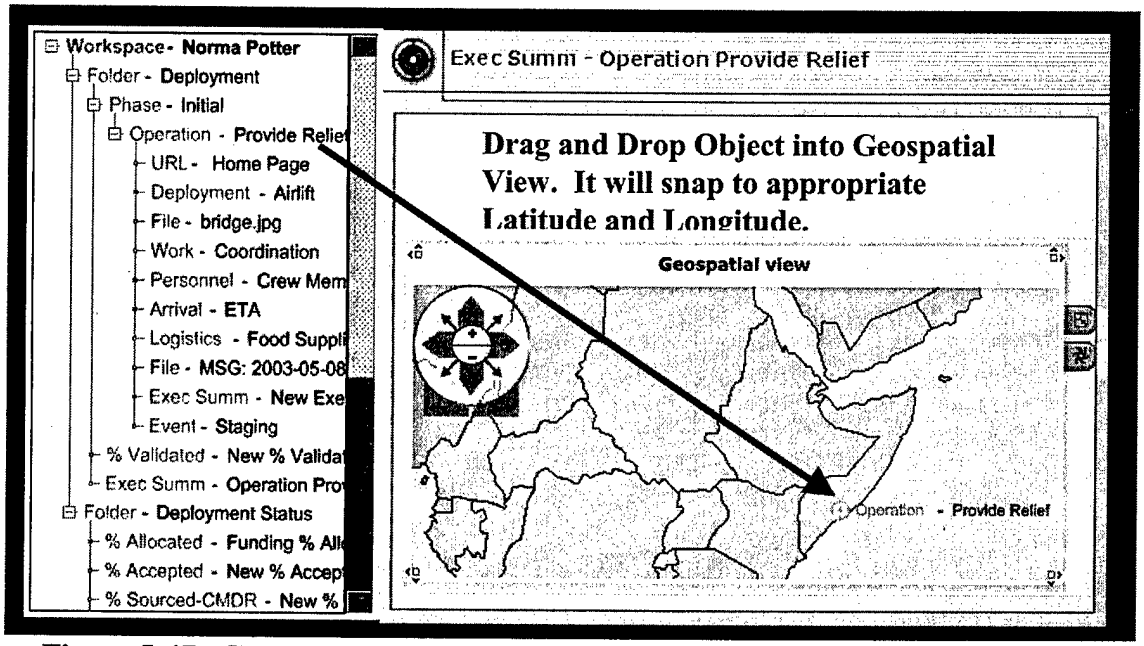

Figure 5-47. Geographic View Dragged and Dropped into Executive Summary Viewer and Object Dragged and Dropped on Map

5.3.1.7 Stickie

Similar to the yellow stickies used to add notes to hard-copy documents or to leave messages for associates, the ***Stickie View*** (Figure 5-48) serves much the same purpose on the DFC2 desktop. The stickie will always contain the name of the user who places it on the desktop, as well as a date/time stamp of placement. Stickies can be placed on top of other views as desired.

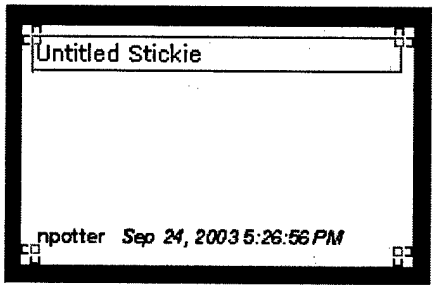

Figure 5-48. Stickie View

The stickie's color can be changed at the discretion of the user by right clicking on the stickie and selecting the desired color from the drop-down menu.

The *Stickie View* within the *Executive Summary Viewer Frame*, with annotation added and the color changed, will look similar to Figure 5-49.

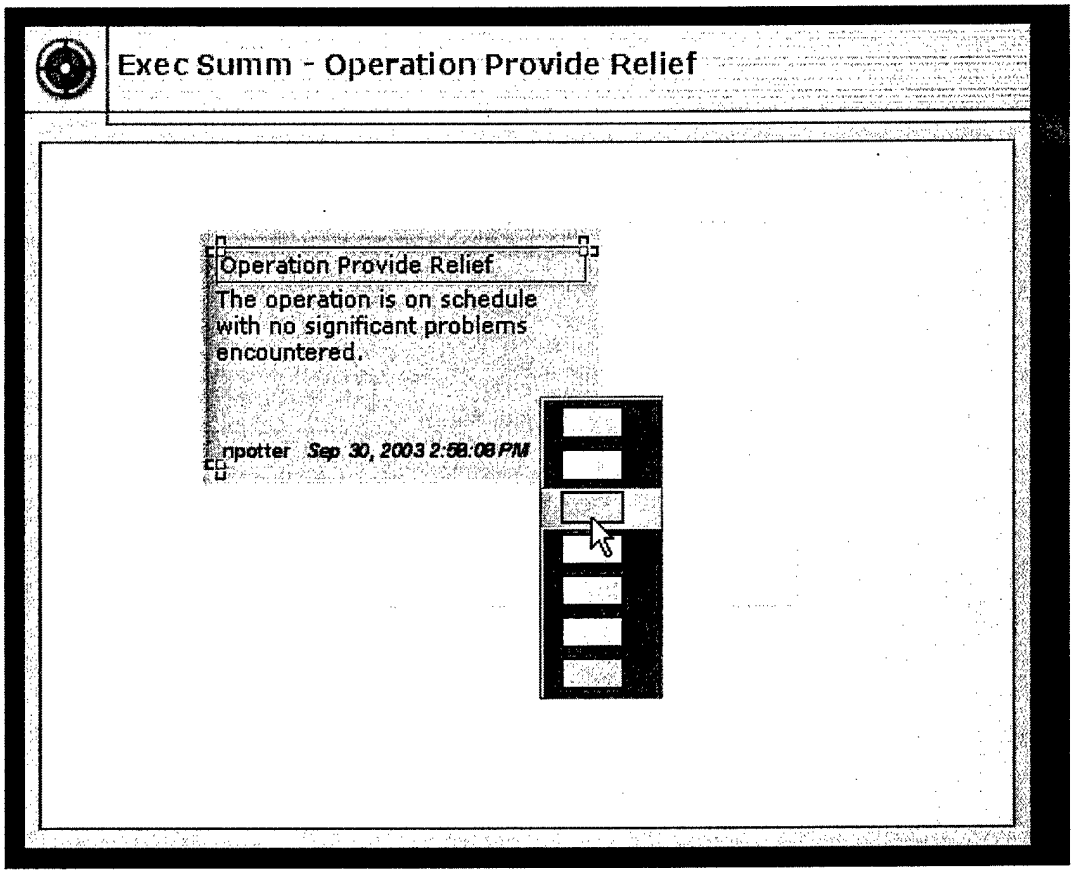

Figure 5-49. Stickie View Dragged and Dropped into Executive Summary Viewer with Annotation Added and Color Changed

5.3.1.8 User Browser

The *User Browser* view, Figure 5-50, displays the login names of all users having an account on the DFC2 system. It also shows the state of the different users' sessions (active, passive, online, or offline). Users are color coded according to their status; online is green and offline is red. This is denoted by the colored symbol in the column to the left of the login name in the *User Browser* frame.

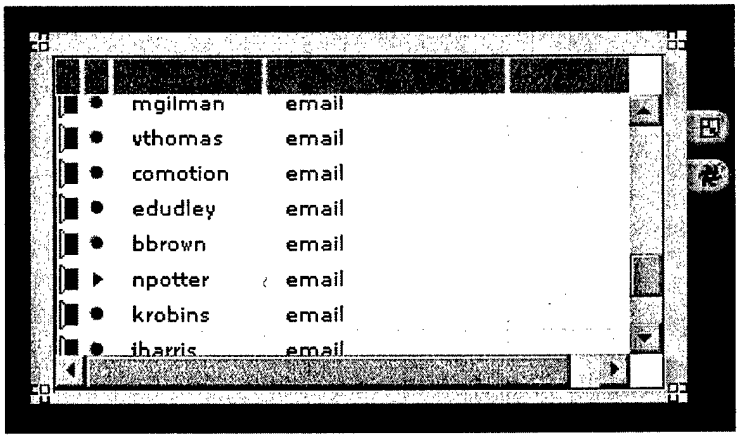

Figure 5-50. User Browser View

5.3.1.9 Image Viewer

The *Image Viewer*, Figure 5-51, is the frame that allows the user to display images. The *Image Viewer* must be dragged and dropped into a viewable area and must have the image file dropped into it in order for the image to be viewable in the display.

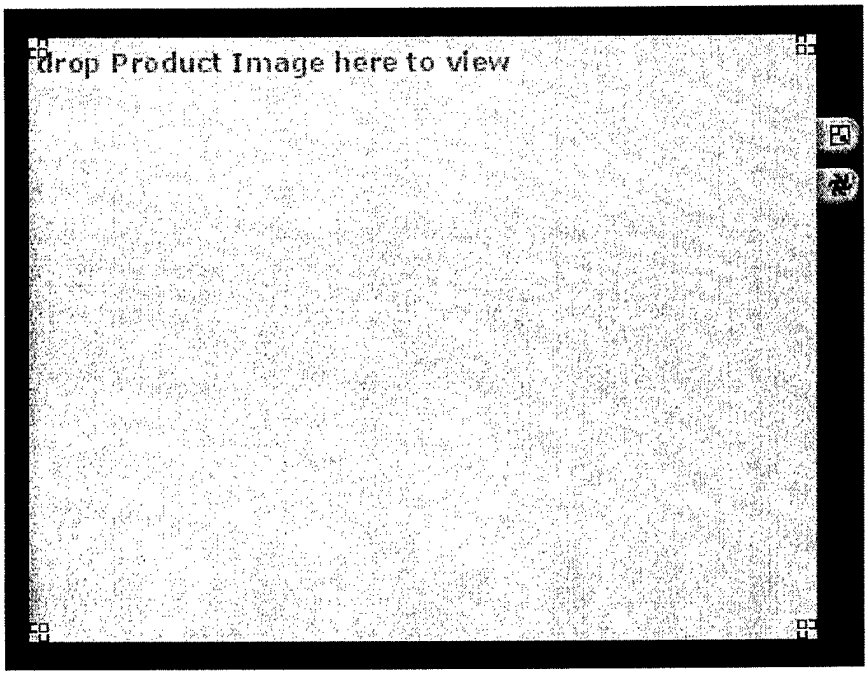

Figure 5-51. Image Viewer

Images are stored in the *Library Workspace*. An image can be dragged from the *Library Workspace* and dropped directly into the *Image Viewer*. Figure 5-52 illustrates dragging the image directly from the *Library Workspace* and dropping into the *Image Viewer* within the *Executive Summary Viewer*.

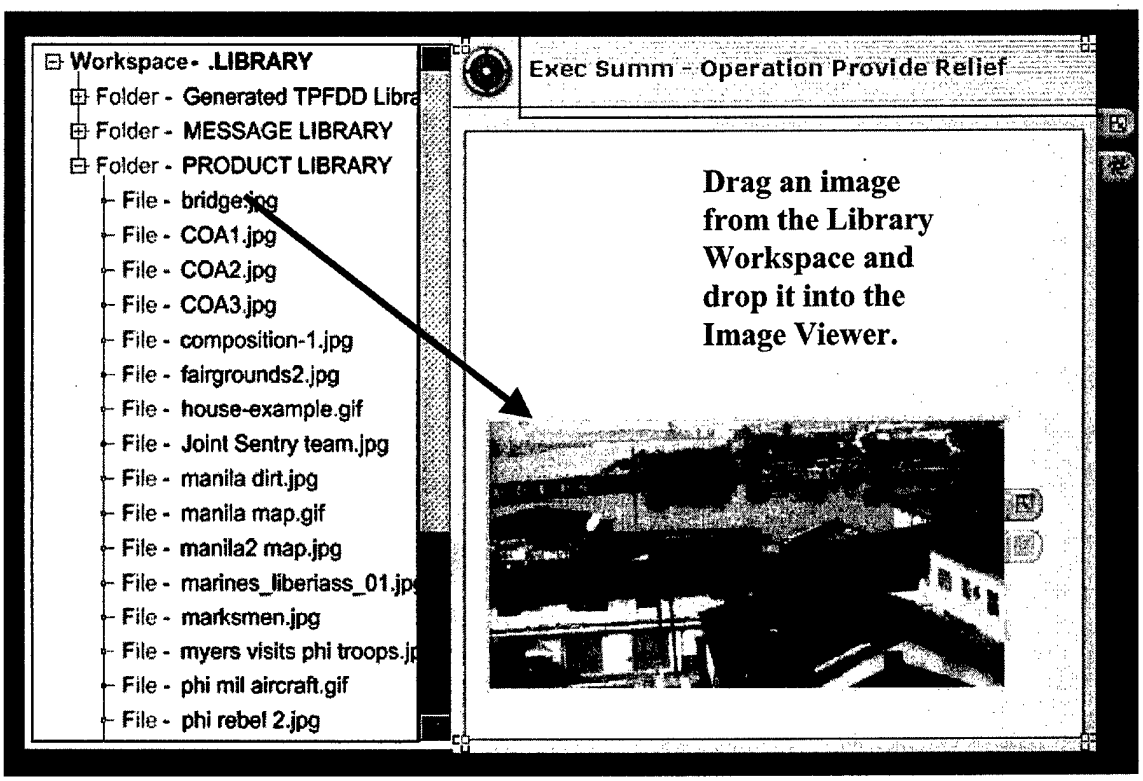

Figure 5-52. Image Viewer Dragged and Dropped into Executive Summary Viewer with Image Dragged from Library and Dropped into Image Viewer

Alternatively, the image may be dragged and dropped into the *User's Workspace* or the *Hierarchy View* and then dragged into the *Image Viewer* from there.

Note: The user can preview an image by right clicking on the image file in the *Library* or other *Workspace* or *Hierarchy View* where it resides and selecting the ***Launch*** option from the drop-down menu. When an image is launched in this manner, it is displayed in a separate browser window as illustrated in Figure 5-53 below.

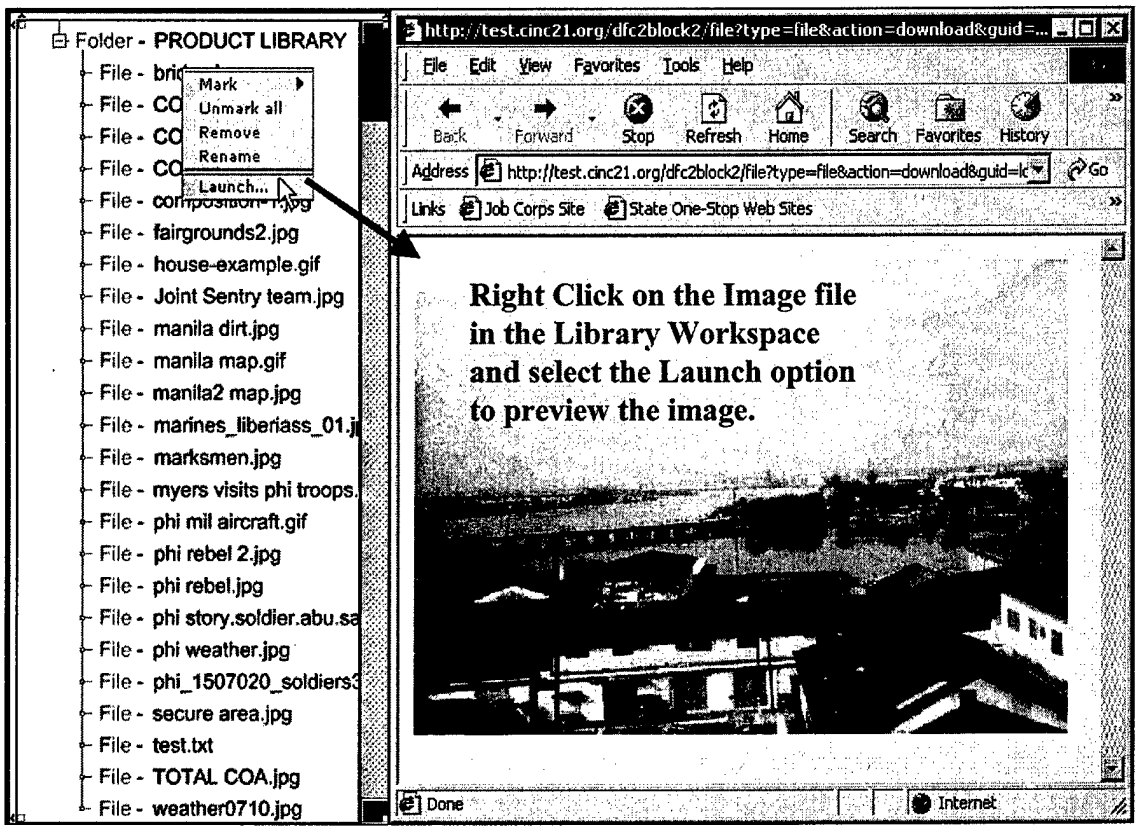

Figure 5-53. Image Launched from the Library Workspace

5.3.1.10 Message Viewer

The *Message Viewer*, Figure 5-54, is the view that allows the user to display messages. The *Message Viewer* must be dragged and dropped into a viewable area and must have the message file dropped into it in order for the message text to be viewable in the display.

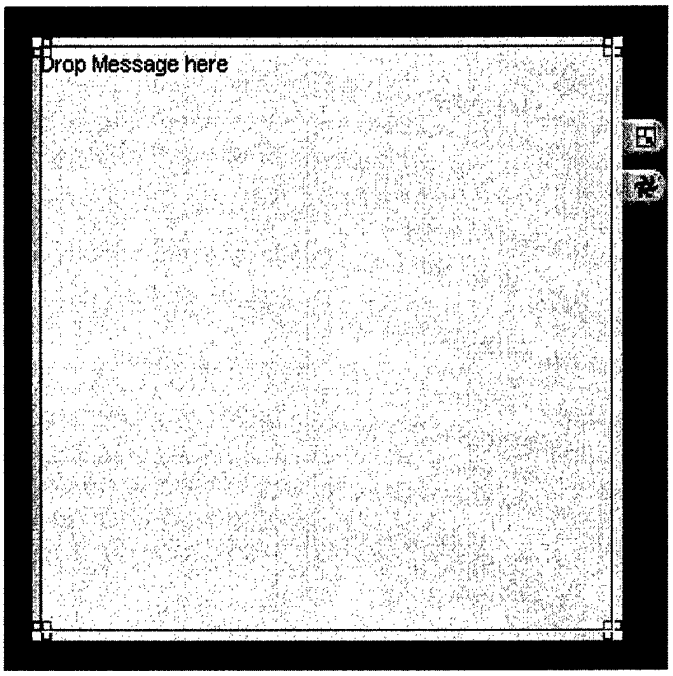

Figure 5-54. Message Viewer

A message can be dragged from a message repository (such as the *Library Workspace*) and dropped directly into the *Message Viewer*. Alternatively, the user may wish to drag the message from the repository and drop it into his/her Private *Workspace* or the *Hierarchy View* and then drag and drop it into the *Message Viewer*. Dragging the message from the *Hierarchy View* and dropping it into the *Image Viewer* within the *Executive Summary Viewer* is illustrated in Figure 5-55 below.

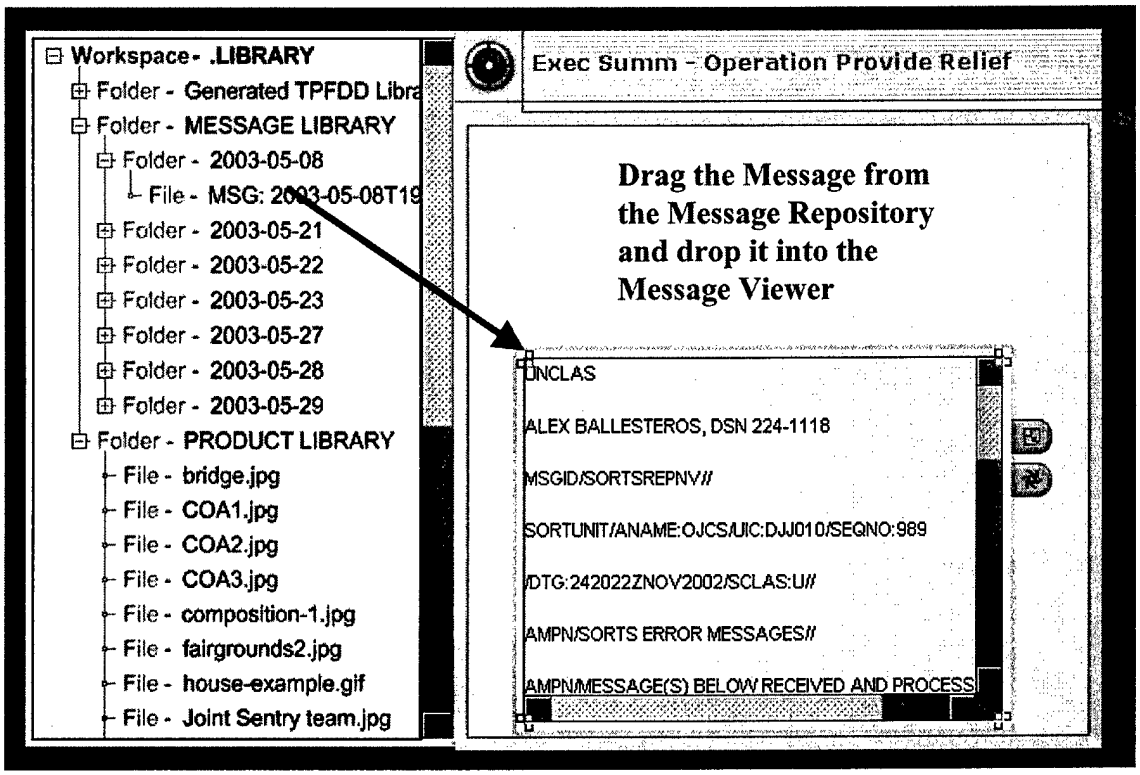

Figure 5-55. Message Viewer Dragged/Dropped into Executive Summary Viewer and Message Dragged from the Library and Dropped into the Message Viewer

5.3.1.11 Timeline View

The ***Timeline View***, depicted in Figure 5-56, provides a pictorial depiction of an object's (e.g., event, operation, etc.) duration based upon its associated Date Time Groups (DTGs). When objects are dropped into the *Timeline View*, the date and time attributes (Planned Start Date, Planned End Date, Actual Start Date, Actual End Date and Due Date) will be displayed.

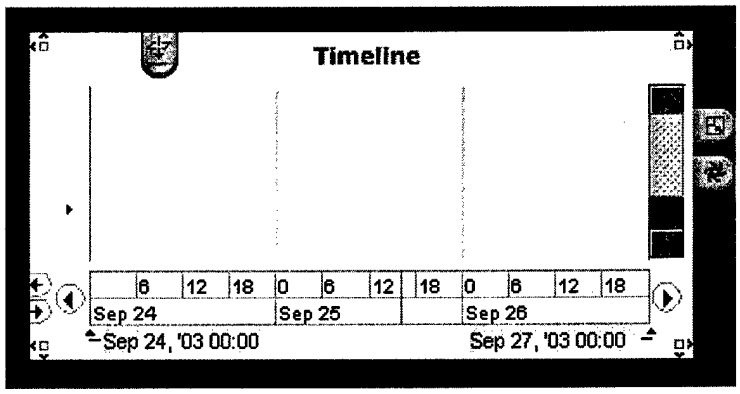

Figure 5-56. Timeline View

Dragging an object (e.g., event, operation) from a *Workspace* (either Public or Private) or the *Hierarchy View* and dropping it into the *Timeline View* will display the associated durations of the object in timeline format. Dragging an object from a *Workspace View* into the *Timeline View* within the *Executive Summary Viewer* is illustrated in Figure 5-57.

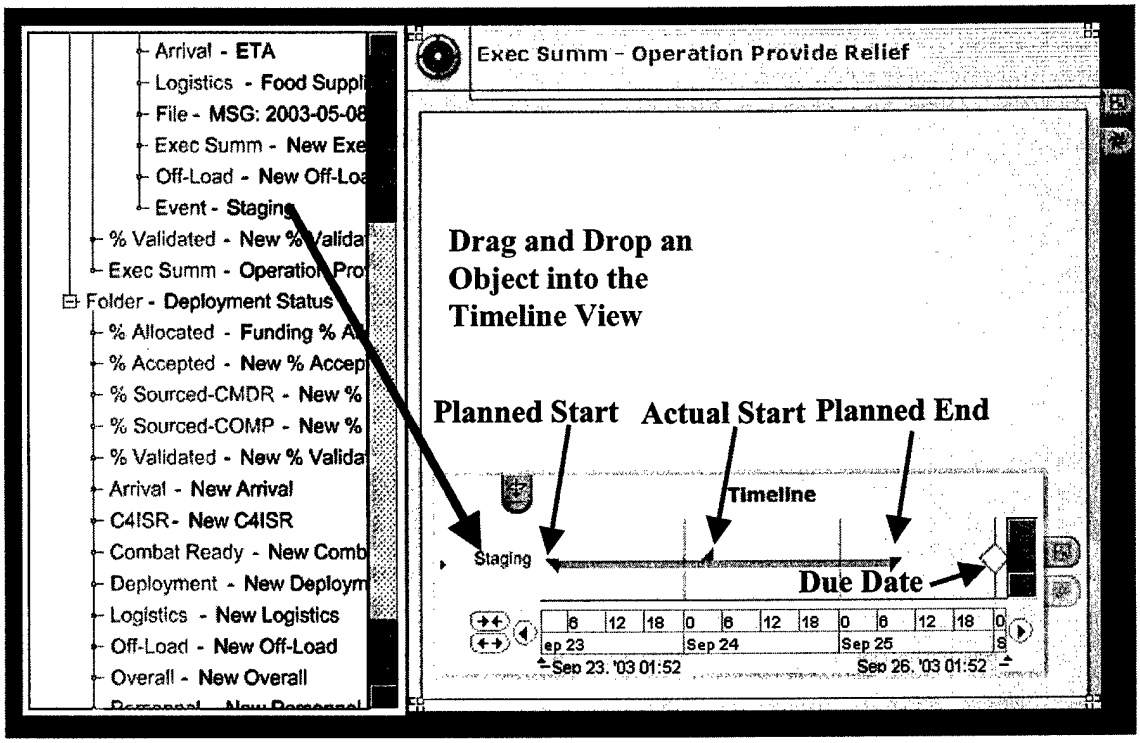

Figure 5-57. Dragging an Object from the Hierarchy View and Dropping it into the Timeline View within the Executive Summary Viewer

The *Timeline View* contains one unique feature that the other views do not possess: a ***Dynamic Query*** tab. The ***Dynamic Query*** tab allows the user to show, hide or highlight object information in the view based on a filtering equation. For example, as depicted in Figure 5-58 below, if the user wishes to show only the events within the view that are in progress, then he/she may click on the ***Dynamic Query*** tab of the *Timeline View*, select the ***Show*** button and complete the query as follows:

Event | completed | is | In Progress

The *Timeline View* will be automatically updated and the resulting view would look similar to the illustration in Figure 5-58.

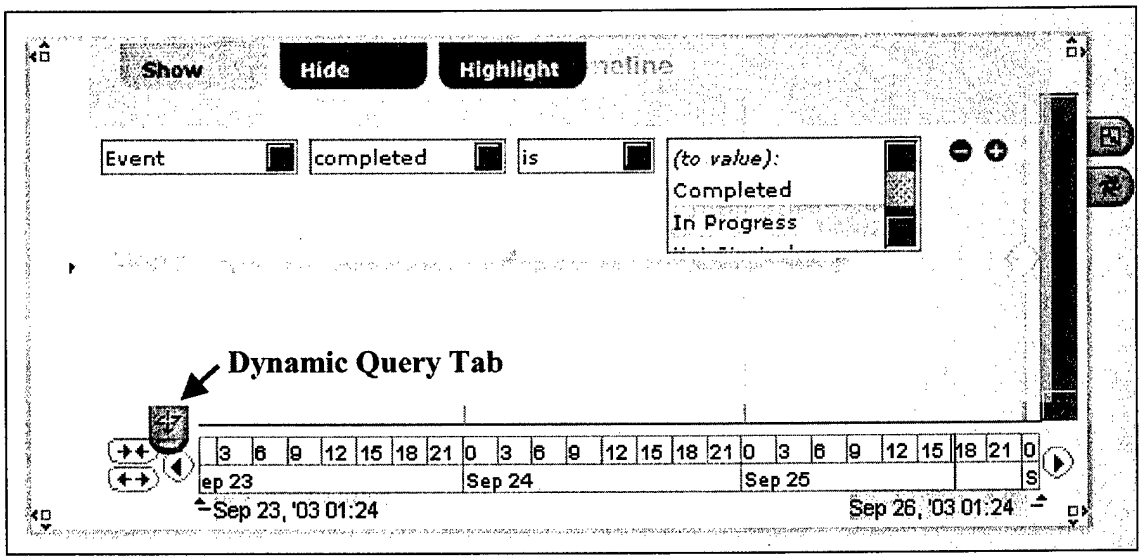

Figure 5-58. Timeline View Dynamic Query Illustration

The user need only click the ***Dynamic Query*** tab, which is now near the bottom of the *Timeline View*, to exit the query mode.

5.3.2 Organizers

The *Organizers* section of the *Dispenser Frame* allows the user to drag organizers into the workspace to assist with organization of information. There are two different organizers from which the user can choose, ***Folder*** and ***Container***, as illustrated in Figure 5-59 below.

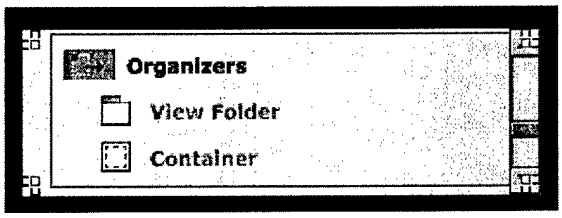

Figure 5-59. Organizers Section of the Dispenser Frame

5.3.2.1 View Folder Organizer

The ***View Folder***, Figure 5-60, organizer can be dragged and dropped onto the desktop, into another folder, or into an *Executive Summary Viewer*. Once placed, the user can employ that folder as a container for organizing views and other objects. Right click on the tab to rename the folder and then press ***Enter***.

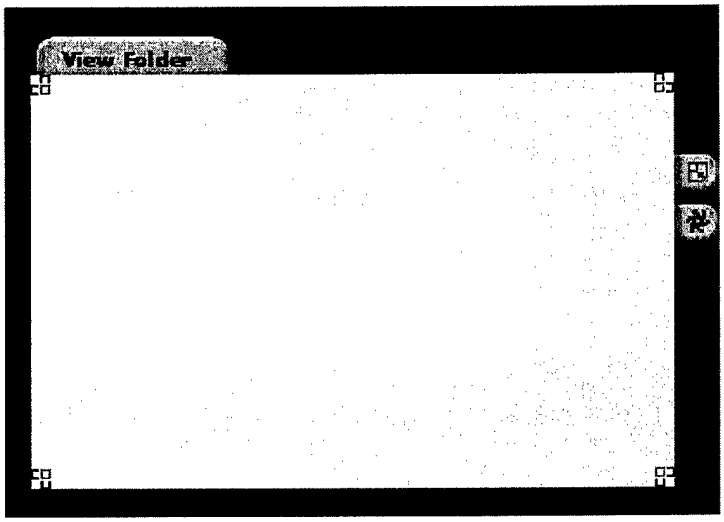

Figure 5-60. View Folder Organizer

Figure 5-61 below depicts the *Executive Summary Viewer* with folders within folders and an object within a folder.

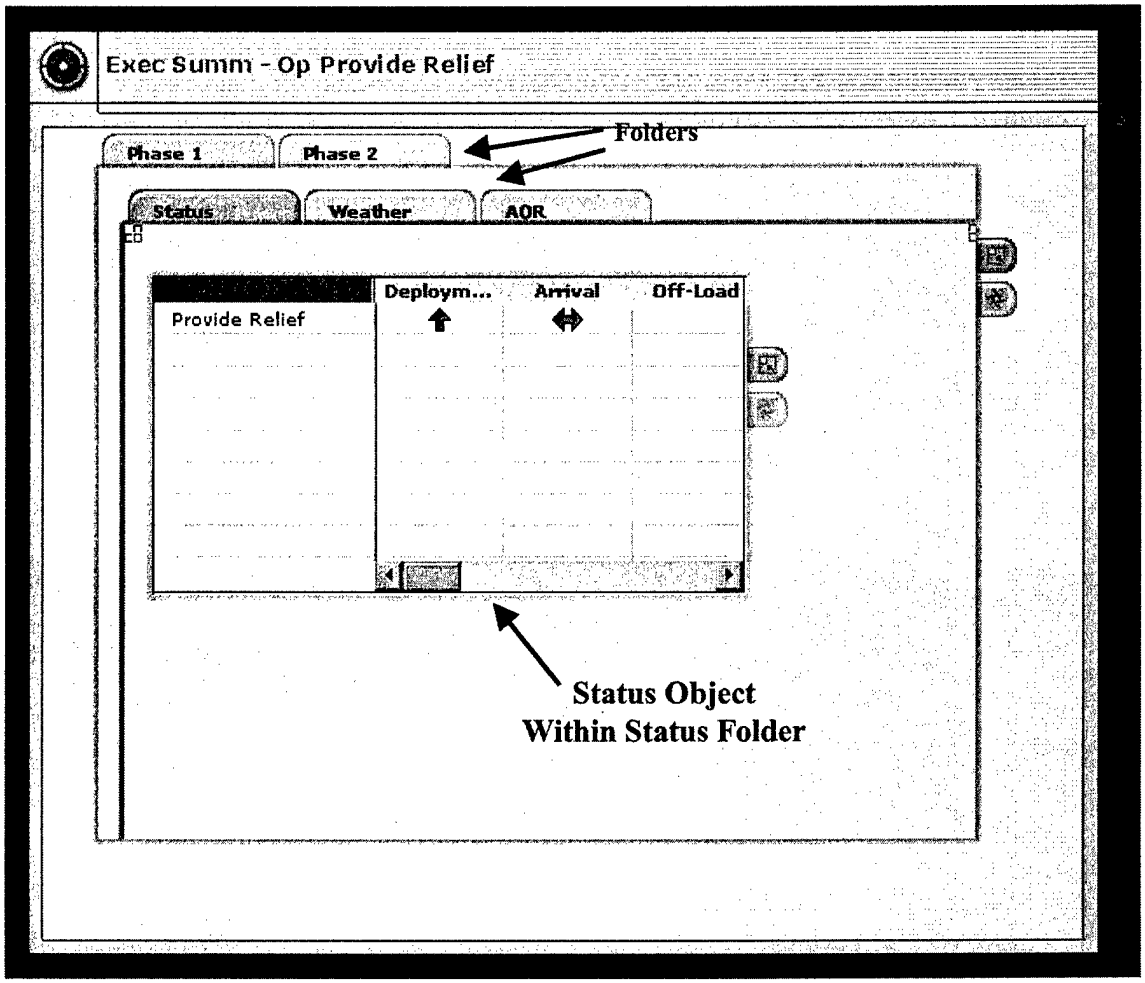

Figure 5-61. Folders within Folders within the Executive Summary Viewer

View Folders allow for maximum usage of the available space within the *Executive Summary Viewer* because the folders overlap each other and allow the user to place information into each. Then the user can click on the appropriate tab to view the information inside each folder.

Folders dropped adjacent to each other will automatically align (snap) together to form a sequentially indexed tab appearance.

5.3.2.2 Container Organizer

Similar to the ***View Folder*** organizer, the ***Container*** organizer, depicted in Figure 5-62 below, is a basic frame with no special features. It is, as its name implies, a receptacle into which the user can drag and display other objects. This is useful if the user wants to gather several related frames together and collaborate on the frames nested within. The major difference between the ***View Folder*** organizer and the ***Container*** organizer is that the ***Container*** organizer does not allow the folders to be snapped together in an overlapping fashion as the ***View Folder*** organizer does. Also, the ***Container*** Organizer does not have a tab that can be named.

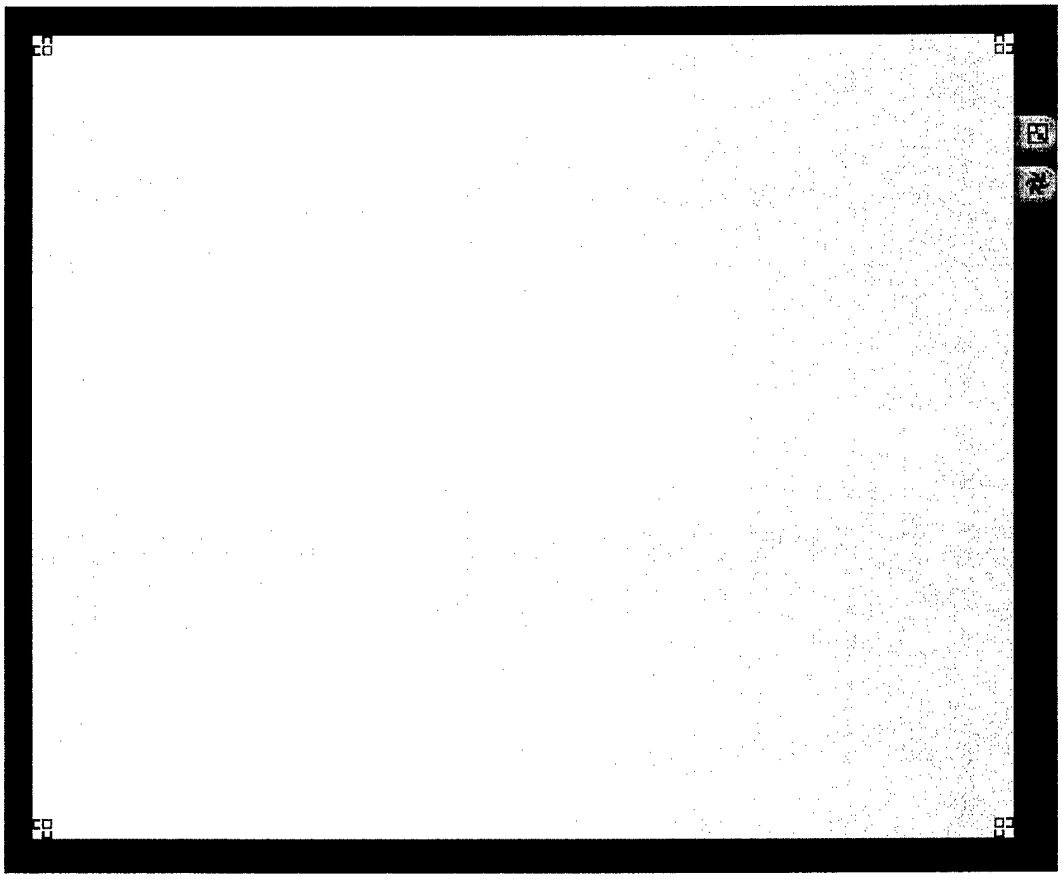

Figure 5-62. Container Organizer

5.3.3 Tools

The *Tools* section of the *Dispenser Frame* contains three options as shown in Figure 5-63 Below: the ***Toolbar***, the ***Trash Can***, and the ***New Object Palette***.

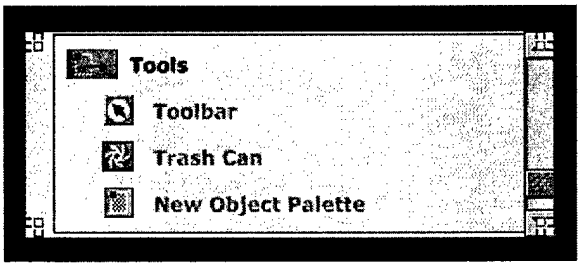

Figure 5-63. Tools Section of the Dispenser Frame

5.3.3.1 Toolbar

The ***Toolbar*** tool is a duplicate of the toolbar that is placed on the desktop by default when the application is first launched. If the ***Toolbar*** is placed into the trash for any reason, then it can be relaunched from the *Tools* section of the *Dispenser Frame* by

clicking on the ***Toolbar*** option and dragging it to the desktop area. The *Toolbar* is described in detail in section 5.3.4.

5.3.3.2 Trash Can

The ***Trash Can*** tool is a duplicate of the ***Trash*** icon that appears on the desktop by default when the DFC2 application is first launched. Multiple ***Trash*** icons can be placed on the desktop if needed. If multiple displays are being used, then putting a ***Trash*** icon on each display will be convenient.

Caution: Be careful when moving objects across the ***Trash*** icon, because it is easy to dismiss items without meaning to.

5.3.3.3 New Object Palette

The ***New Object Palette*** tool, when dragged onto the desktop, provides a duplicate of the *New Object Palette Frame* that is described in Section 5.3. This tool allows the user to re-launch the *New Object Palette Frame* should the default frame be dismissed from the desktop for some reason.

It is also convenient to add a *New Object Palette* tool to each display if multiple displays are being used because the objects available within this tool are the most commonly used objects when creating an *Executive Summary*.

5.3.4 Toolbar

The ***Toolbar***, Figure 5-64, provides the user with the tools to add annotations to objects within frames, objects (such as maps, tables, etc.), or the workspace. The ***Toolbar*** tools include: the ***Selector*** tool, the ***Ink*** tool, the ***Flashlight*** tool, the ***Marking*** tool, and the ***Eraser*** tool.

Figure 5-64. Toolbar

5.3.4.1 Selector Tool

The ***Selector*** tool is the first item on the tool bar and looks like an arrow. The ***Selector*** tool is the active tool by default. When the user has finished using the other tools on the toolbar, the ***Selector*** tool must be activated (or clicked on) to stop the action of any other tool on the toolbar.

5.3.4.2 Ink Tool

The ***Ink*** tool allows the user to make annotations on views or objects. The ink color can be changed to match the user's preferences.

When the ***Ink*** tool is selected in the *Toolbar*, a color palette and line style selection palette is displayed as illustrated in Figure 5-65.

Figure 5-65. Toolbar with Ink Tool Selected

Annotations that are made using the ***Ink*** tool can be erased by using the ***Eraser*** tool as described below in paragraph 5.3.4.6.

5.3.4.3 Flashlight Tool

The ***Flashlight*** tool is similar to the ***Marking*** tool described in paragraph 5.3.4.5, except the highlighting vanishes when the user finishes the click-and-drag action. This tool is useful if the user wants to draw attention to an item, such as a map or element in a table, during a collaboration session and does not wish to leave ink in the display. When the ***Flashlight*** tool is selected, the color and line style palettes are displayed as illustrated in Figure 5-66.

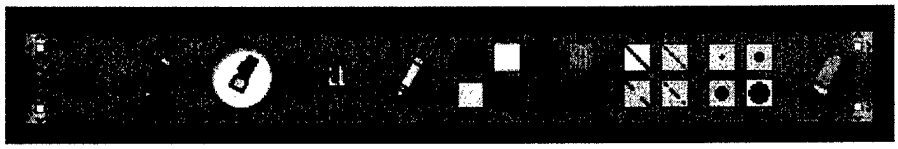

Figure 5-66. Toolbar with Flashlight Tool Selected

Highlighting is temporary and will vanish when the cursor is released.

5.3.4.4 Text Tool

The ***Text*** tool allows the user to add text to frames and other objects on the desktop.

When the ***Text*** tool is selected, the color and font style and size palettes are displayed as illustrated in Figure 5-67.

Figure 5-67. Toolbar with Text Tool Selected

Remember to press the **Enter** key after completing each text entry.

Once text has been entered into an object, it can also be moved around with the text cursor.

5.3.4.5 Marking Tool

The ***Marking*** tool allows the user to highlight specific data. Unlike highlighting with the ***Flashlight*** tool, ***Marking*** does not vanish when the click-and-drag action ends. When the ***Marking*** tool is selected, the color and line style palettes are displayed as illustrated in Figure 5-68. Marked items show up as marked in all frames showing that particular data, thus tying all instances of the specific data to the selected color.

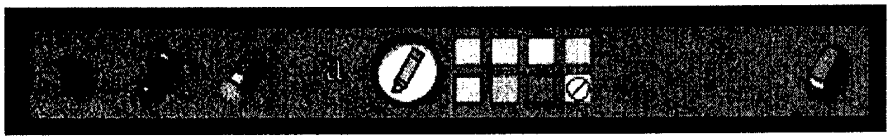

Figure 5-68. Toolbar with Marking Tool Selected

5.3.4.6 Eraser

The ***Eraser*** tool, selected in Figure 5-69, allows the user to remove annotations that have been placed by the ***Ink*** tool. It does not remove other symbols or other elements.

Figure 5-69. Toolbar with Eraser Tool Selected

5.4 Related Processing

See the DFC2 System Administrator Manual for information relating to processing.

5.5 Data Backup

See the DFC2 System Administrator Manual for information relating to data backup.

5.6 Error Recovery

See the DFC2 System Administrator Manual for information relating to error recovery.

5.7 Messages

The following are some messages the user may see if he/she is unable to login to the DFC2 application. There is also a short description of what the user should do if any of these messages is displayed.

Message	Resolution
Login information is incorrect.	1. Ensure that the User Name and Password are spelled correctly. 2. Match the User Name and password entered against those issued by the System Administrator 3. Check the Caps Lock to ensure that it is not activated. Passwords and User Names are case-sensitive. 4. Contact the DFC2 System Administrator for assistance.
No user account for 'npotter'.	1. Contact the DFC2 System Administrator.
Workspace info is not installed on the ser	1. Contact the DFC2 System Administrator.
Unable to connect to the server.	This may be a firewall issue, the server may not be available, or the URL may not have been entered correctly. 1. Ensure that the URL is entered correctly in the Address field of the browser. 2. Try again later. 3. Contact the DFC2 System Administrator.

6. Notes

6.1 Glossary of Terms

Advantage: A Decision Object that relates the specific advantages of a given Course of Action (COA) generated by staff Analysis.

Analysis: The thought process involved in the development of a COA.

CCIR: Commander's Critical Information Requirements. Critical information directly affects the successful execution of operations. The CCIR includes information the commander requires that directly affects his decisions and dictates the successful execution of operations. CCIRs are specified by the commander for each operation.

COA (Course of Action): Plans developed by a commander's staff to provide a suggested approach to a given Operation, Phase or Exercise.

Frame: A container that is similar to what other software applications refer to as a "window."

Data Persistence: This term is used to describe the retention of data within the system when changes are made within frames. The data is not lost when the user exits the system, rather it is saved in the database for access when the user once again logs into the system.

Decision Points: Decision points are events, times or locations on the battlefield where tactical decisions are required during mission execution. Decision points do not dictate what the decision is, only that one must be made, and when and where it should be made. In DFC2 planning, Decision Points drive the generation of CCIRs and set the context for the gathering of information necessary for decision shaping.

Disadvantage: A Decision Object that relates the specific disadvantages of a given COA generated by staff Analysis.

Event: Any activity occurring at a given place and time. Events can include meetings, gatherings, news worthy activity or any episode that may have an effect on military or political goals and objectives.

Executive Summary: (Exec Summ) A DFC2 Decision Object used to contain all of the objects and views required for display in an Executive Summary viewer.

Exercise: A planned military activity, usually initiated to test the feasibility of a contingency plan or to effect specific training for a given command or joint endeavor.

Folder: An organization tool used to store related objects in the DFC2 workspace. It is similar to a file folder in a Windows file structure environment.

FORCE: Subordinate units of a given military command applied to a specific operation, phase or exercise. Examples may include a Support or Assault Force.

Operation: Planned activity by a military or naval force such as a maneuver or campaign. Examples: Operation Enduring Freedom, Operation Desert Storm.

Phase: Any sequenced activity related to an operation. Phases are the "steps" or order of activities upon which an operation is planned and carried out.

TPFDD: Time-Phased Force and Deployment Data—The Joint Operation Planning and Execution System (JOPES) database portion of an operation plan; it contains time-phased force data, non-unit- related cargo and personnel data, and movement data for the operation plan, including: A. In-place units. B. Units to be deployed to support the operation plan with a priority indicating the desired sequence for their arrival at the port of debarkation. C. Routing of forces to be deployed. D. Movement data associated with deploying forces. E. Estimates of non-unit-related cargo and personnel movements to be conducted concurrently with the deployment of forces. F. Estimate of transportation requirements that must be fulfilled by common-user lift resources as well as those requirements that can be fulfilled by assigned or attached transportation resources.

T-RDD - Time-Phased Force and Deployment Data - Required Delivery Date. The calendar date when material is required by the requisitioner.

ULN: Unit line number—A seven-character, alphanumeric field that uniquely describes a unit entry (line) in a Joint Operation Planning and Execution System time-phased force and deployment data.

6.2 Acronyms

ACTD	Advanced Concept Technology Demonstration
AUSNZUKCAN	Australia, New Zealand, United Kingdom and Canada
CCIR	Commander's Critical Information Requirements
C-Day	Unnamed day on which a deployment operation begins
CINC21	Commander in Chief 21
CIC	Content Indicator Code
CMDR	Commander
COA	Course of Action
COMP	Component
CONOPS	Concept of Operations
DFC2	Decision Focused Command and Control
DTG	Date Time Group
EAD	Earliest Arrival Day
GOTS	Government Off-the-Shelf
GUI	Graphical User Interface
JOPES	Joint Operational Planning and Execution System
NATO	North Atlantic Treaty Organization
LAD	Latest Arrival Day
NOFORN	No Foreign Release
PAX	Passengers
RELJAPAN	Releasable to Japan
RELROK	Releasable to the Republic of Korea
SAM	System Administrator's Manual
STONS	Short Tons
TPFDD	Time-phased Force and Deployment Data
T-RDD	Time-phased Force and Deployment Data - Required Delivery Date
UIC	Unit Identification Code
ULN	Unit Line Number
UTC	Unit Type Code
URL	Uniform Resource Locator

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